

Senate Hearings

Before the Committee on Appropriations

Y 4. AP 6/2: S. HRG. 104-351/
PT. 1

Agriculture, Rural Development, and...

Agriculture, Rural Development, and Related Agencies Appropriations

Fiscal Year 1996

104th CONGRESS, FIRST SESSION

H.R. 1976

PART 1 (Pages 1-1469)

COMMODITY FUTURES TRADING COMMISSION
DEPARTMENT OF AGRICULTURE
FARM CREDIT ADMINISTRATION
FOOD AND DRUG ADMINISTRATION

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE ONE HUNDRED FOURTH CONGRESS

FIRST SESSION

ON

H.R. 1976

AN ACT MAKING APPROPRIATIONS FOR AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES PROGRAMS FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1996, AND FOR OTHER PURPOSES

PART 1 (Pages 1-1469)

**Commodity Futures Trading Commission
Department of Agriculture
Farm Credit Administration
Food and Drug Administration**

Printed for the use of the Committee on Appropriations



U.S. GOVERNMENT PRINTING OFFICE

87-605 cc

WASHINGTON : 1996

For sale by the U.S. Government Printing Office
Superintendent of Documents, Congressional Sales Office, Washington, DC 20402
ISBN 0-16-052338-9

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

WEDNESDAY, MARCH 1, 1995

**U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.**

The subcommittee met at 10:25 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.
Present: Senator Cochran.

COMMODITY FUTURES TRADING COMMISSION

STATEMENT OF MARY SCHAPIRO, CHAIRMAN

OPENING REMARKS

Senator COCHRAN. The meeting of the subcommittee will come to order.

Today we begin our hearings on the budget submitted by the administration for fiscal year 1996 with those agencies which fall within the jurisdictional responsibilities of this committee.

This morning, at our first hearing of the year, we will be reviewing the budget requests of the Commodity Futures Trading Commission, the Farm Credit Administration, and the Food and Drug Administration.

The Commodity Futures Trading Commission proposes a 21.5-percent increase in its budget for fiscal year 1996, compared to the fiscal year 1995 level. This is to permit an increase in staffing and to allow the CFTC to meet its other responsibilities.

We are happy to have Ms. Mary Schapiro, who is Chairman of the Commodity Futures Trading Commission, here to present the budget and discuss it with the committee.

We have a copy of your statement, Ms. Schapiro. We will put it in the record in full and invite you to make any comments on the subject that you care to. Please proceed.

STATEMENT OF MARY SCHAPIRO

Ms. SCHAPIRO. Thank you very much, Mr. Chairman. It is a pleasure to be here today, and I have a brief oral statement.

I appreciate the opportunity to discuss with you the President's fiscal year 1996 budget request for the Commodity Futures Trading Commission.

As you have said, the President has requested \$59,711,000 with a staff ceiling of 627. This is a modest increase over the appropriate

tions levels of the last several years, a time when markets have grown dramatically while CFTC resources have declined significantly.

I want to share with you very briefly some statistics that highlight how the explosive growth in futures and options markets challenge the Commission's ability to carry out its oversight responsibilities.

As you know, Mr. Chairman, exchange futures and options trading volume has grown over 200 percent in the last 10 years, while the CFTC staff has increased only 6 percent.

CFTC market surveillance staff has been reduced by 25 percent since 1980, while the number of contracts that we must actively monitor has increased by 126 percent.

Funds that are committed to professional management in the futures industry have grown from \$750 million in 1980 to \$25 billion today. Yet we have only seven FTE's devoted to oversight of this activity.

In just the last 3 years, exchange trading volume has grown by more than 42 percent while our staff has in fact decreased by 8 percent.

In contrast, the budgets of the other financial service regulators have increased substantially. Since 1992, the SEC's budget has increased 35 percent. Funds dedicated to the Comptroller of the Currency and the Federal Reserve Board have increased by 28 and 33 percent. The CFTC's funding level grew by only 4 percent, less than the rate of inflation.

The decline in resources and staff has hampered the CFTC in carrying out its vital duties, including those created by the Futures Trading Practices Act of 1992. This legislation, as you know, gave the CFTC new regulatory tools to ensure market integrity and authority to exempt certain transactions from regulation. The act also directed the Commission to undertake 12 rulemakings and six studies within very tight timeframes, all of which were accomplished without additional resources that had, in fact, been anticipated when those duties were assigned.

In addition to meeting the challenges posed by regulation of the organized exchanges, the Commission also has been increasingly involved in reviewing the developments in the over-the-counter markets. The Commission has promoted market certainty by exempting swaps and certain other derivatives from the Commodity Exchange Act while preserving, most importantly, our ability to investigate and prosecute fraud. The Commission is also a member, along with the Treasury, the Federal Reserve, and the SEC, of the President's Working Group on Financial Markets. Through this vehicle and others, we are considering a wide range of OTC issues.

The Commission's concerns necessarily extend beyond domestic exchange and OTC markets. The global financial marketplace is becoming increasingly interlinked as world demand drives the growth of exchange derivative markets. U.S. markets are forging trading and other links with their foreign counterparts. Brokerage firms, subject to our regulation, are becoming increasingly multinational. To ensure adequate enforcement of market, customer, and financial protections, the Commission must carefully monitor international developments, such as the recent failure of Barings, the

British merchant bank. And as an aside, I should tell you that the energy and resources of the staff at the CFTC over the last several days have been almost totally consumed by the collapse of Barings Bank. The events surrounding the collapse of Barings demonstrate the increasingly global nature of the marketplace and how internationalization has challenged all regulators, including the CFTC, to adapt our regulatory systems and to cooperate in responding to market developments.

Finally, I want to emphasize that the Commission is not supporting increased funding without making every effort to cut costs internally. Over \$2 million in controllable budget activities were either reduced or eliminated in our fiscal years 1993 and 1994 operating budgets, and we continue to look for additional savings.

We are also committed, as you know, to regulatory reform, consistent with the objectives of more efficient and streamlined Government. We are undertaking a comprehensive review of ways to simplify both regulatory and internal rules. Soon after my arrival, I asked all the exchanges and trade associations to identify for us issues of major importance to them that arise from our regulatory system. We meet on a quarterly basis, at least. And we will be convening a series of public roundtables beginning in April to consider changes to the Commission's regulatory framework.

In this complex, rapidly changing financial marketplace, the Commission's role as a strong, independent regulator has never been more important. The Commission cannot effectively implement the responsibilities that Congress has given it and assume the duties imposed by marketplace developments without more resources.

Under these circumstances, we believe the increase proposed in the President's budget is both modest and fully justified.

Thank you, and I will of course be happy to answer your questions.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much for your statement and for your cooperation with the Committee. We have your complete statement and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF MARY L. SCHAPIRO

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to discuss with you the President's fiscal year 1996 budget request for the Commodity Futures Trading Commission ("Commission" or "CFTC"). As you know, the President's fiscal year 1996 budget request for the CFTC is \$59,711,000 with a staff ceiling of 627. This request represents a modest increase over the appropriations levels of the last several years, a time during which the markets have grown dramatically while CFTC resources have declined significantly.

The Commission recognizes that the Subcommittee and the Congress face particularly difficult appropriations decisions in this year's budget environment. Nevertheless, the requested increase is not only justified but essential if the Commission is to carry out fully and effectively the mandate assigned by the Congress. The Commission has met the challenge of shrinking resources for each of the past three years. With operating budgets slashed, a number of functions transferred to industry self-regulators and staff stretched to the limit, without additional funding we will not be able to provide the oversight or enforcement presence that market users depend upon.

The CFTC was created in 1975 because Congress recognized the need for an expert, independent agency to protect the important national interests that are served by commodity futures and options markets and to ensure market integrity through oversight of the exchanges and the thousands of intermediaries who invest individual, pension and corporate funds in these markets. The price discovery and risk shifting functions of these markets, long utilized by agricultural producers and processors, are now essential to the economic well-being of virtually every sector of the U.S. economy. Today, while the safety and integrity of the futures markets are as important as ever to processors,

producers, and consumers, they are now equally as important to bankers, multinational corporations and mutual fund advisors.

FUNDING LEVELS AND OPERATIONAL EFFECTS

Since 1992, the Commission's budget has remained essentially unchanged and staffing levels in fact, have decreased. During the same time period, the commodity futures and options markets have experienced explosive growth, thereby challenging the Commission's ability to meet market demands and its own oversight responsibilities. The spectacular growth in the U.S. futures markets has been accompanied and fueled by extraordinary innovation in product development. In addition to agricultural, metals and energy products, futures and options are now offered on a vast array of financial instruments including foreign currencies, U.S. and foreign government securities, and U.S. and foreign stock indices. The staff of the Commission has had to develop significant expertise in the evaluation and trading of all of these products.

Increased market activity and innovation require increased surveillance, exchange oversight, reviews of new products, financial integrity and sales practice audits of registrants and investigations and prosecution of illegal trading practices. Further, the explosive growth of over-the-counter ("OTC") derivative instruments during the same period has further strained the Commission's resources, adding new responsibilities to address questions of systemic risk and the fair treatment of municipalities, pension funds, and other end-users of the derivatives markets.

Over the last ten years, exchange futures and options trading volume has tripled (170 million to 510 million contracts) while Commission staff has risen by just six percent (512 to 543 FTEs). Since 1980, the Commission's market surveillance staff has been reduced by 25 percent (79 to 60 FTEs) while the number of active contracts under staff review has increased by 126

percent (83 to 188). In addition, funds committed to professional management for futures trading have grown dramatically, from \$750 million in 1980 to \$25 billion dollars today. The staff devoted to oversight of this activity, however, remains minimal -- seven FTEs compared to two a decade ago. Further, the increasingly sophisticated nature of financial transactions and services domestically and across international boundaries has required a commensurate increase in the intensity and sophistication of enforcement efforts.

In the last three years alone, as exchange trading volume grew by more than 42%, OTC derivatives proliferated, and significant legislation passed by Congress added to the list of Commission responsibilities. At the same time, the CFTC's staff actually decreased by 8% percent. Attached to this testimony are charts depicting the growth of exchange volume and the growth in funds committed to professional management for futures trading relative to staff size and a summary of the allocation of additional staff that is contemplated by the budget request.

During comparable periods of time, the budgets of other federal financial service regulators have increased substantially. Total funds budgeted for the Securities and Exchange Commission ("SEC") since 1992 have increased 35%, and the funds dedicated to the functions of the Office of the Comptroller of the Currency and the Federal Reserve Board increased by 28% and 33%, respectively. The CFTC's funding level grew only 4%, somewhat less than the inflation rate between 1992 and 1995.

The decline in resources and staff has hampered the CFTC in carrying out its statutory responsibilities. To maintain staffing at the highest possible levels, CFTC operating accounts have been slashed. Over \$2 million in controllable budget activities were either reduced or eliminated in the fiscal year 1993 and 1994 operating budgets. Specific cutbacks in operating expenses during the past three fiscal years have included, among

other decreases, a 17% reduction in travel related expenses, an 18% cut in the cost of communications and utilities, and a 33% decrease in supply accounts. Presently, administrative expenses including, among other items, rents, travel, and training, account for approximately 25% of the Commission's total expenditures, a smaller proportion than other federal departments and agencies.

The Commission will continue to make the most effective use of the resources available to it to fulfill its increasing responsibilities. Within the last year, the Commission formed an internal working group to further streamline the administration of regulatory programs, internal operations, personnel matters, and improve automation. Some of the changes already implemented include more efficient procedures for handling small procurements; selection of new, more efficient office space; and more efficient inventory and payroll procedures. In addition, because effective enforcement is critical to market integrity, the Commission has undertaken an intensive review of its enforcement program to ensure the most efficient allocation of the limited resources in this area.

STATUTORY RESPONSIBILITIES

Futures Trading Practices Act

As noted, the Futures Trading Practices Act of 1992 ("FTPA") provided the Commission with significant new responsibilities. With its passage, the Commission received new regulatory tools to ensure market integrity and authority to exempt certain transactions from regulation under the Act. At the same time, the legislation directed the Commission to conduct numerous rulemakings and studies within prescribed deadlines. The Commission accomplished the following actions pursuant to the provisions of the FTPA within the required time frames:

- Approved final rules exempting swap transactions meeting specified criteria from regulation under the Act;

- Approved final rules exempting hybrid instruments that are not predominately composed of a commodity interest from certain Commission regulations;
- Issued a final order exempting certain contracts for the deferred purchase or sale of energy products that meet specified criteria from regulation under the Act;
- Adopted rules addressing dual trading for contract markets whose volume is 8,000 contracts or more, subject to exemptive relief based on the quality of the trade monitoring system;
- Adopted rules requiring the registration of floor traders and subjecting them to the same background fitness checks and disqualification provisions as other registrants;
- Approved final rules requiring the registration of broker associations;
- Approved final rules regarding the composition of certain self-regulatory organization governing boards and major disciplinary and oversight committees;
- Approved final rules regarding procedures for exchange emergency actions;
- Adopted rules requiring that all new individual registrants attend ethics training within six months of registration and all other individual registrants attend periodic ethics training sessions;
- Approved final rules that authorize the suspension of registration for certain registrants charged with felonies;
- Approved final rules establishing procedures regarding oral orders placed by a member present on the floor of a contract market for an account owned or controlled by that member; and
- Adopted rules to prohibit certain types of insider trading.

In addition, the following mandated studies have been presented to Congress:

- The study of OTC Derivative Markets and Their Regulation - October 1993;
- The Competitiveness Study (a study of U.S. competitiveness in the global futures and options market) - April 1994;
- The Penalties Study and Guidelines (a study of the experience of the Commission and SROs imposing penalties and sanctions) - November 1994;
- The Computerized Futures Trading Study - November 1994; and
- An Assessment of Required Exchange Audit Trail Systems - November 1994.

Ongoing Responsibilities

In addition to implementing the provisions of the FTPA, the Commission has continued to perform its other oversight and enforcement responsibilities. The Commission has approved a record 118 new contracts for trading on regulated exchanges during the last three years; 28 of these contracts were approved in fiscal year 1994. During the last three years, the Commission has processed 3,436 rules submitted by the exchanges and the NFA. In addition, we have continued to review the enforcement of exchange trade practice, disciplinary, market integrity, and audit trail system rules. We also have acted on proposals to facilitate new market structures, principally including two significant exchange mergers: the New York Mercantile Exchange and the Commodity Exchange; and the New York Cotton Exchange and New York Futures Exchange. Finally, the Commission has continued vigilant monitoring of the markets for manipulative activities; the Commission's market surveillance program performs daily monitoring of all active markets and related large trader activities, market prices, and supply and demand factors. This program is particularly important for markets that involve substantial physical deliveries of commodities, including agricultural commodities. The Commission's 1994 Cattle Study focused on this issue particularly with respect to the trading of cattle futures contracts during March and April of 1994.

The Commission's enforcement program provides vigorous enforcement of the Commodity Exchange Act, addressing a wide range of fraudulent and other illegal conduct. Since the beginning of fiscal year 1992, the Commission has commenced over 170 enforcement actions, resulting in assessed civil money penalties exceeding \$26 million, preliminary and permanent injunctions against nearly 120 persons and firms, and other forms of sanctions and remedies. The enforcement program continues to

focus on customer fraud by both registered and unregistered persons and on trade practice violations that occur on the floors of futures exchanges.

The Commission also has taken strong enforcement actions in other areas. In the area of off-exchange derivatives, the Commission and the SEC simultaneously brought and settled actions against an affiliate of Bankers Trust Company for alleged fraud in the marketing of certain over-the-counter transactions. The affiliate, BT Securities, agreed to pay a \$10 million civil money penalty and undertake an internal review and, if necessary, modify its derivatives marketing, in order to settle the two actions. Also, during 1994, enforcement actions resulted in the highest money penalties ever assessed by the Commission against financial and speculative position limit violations.

ADDITIONAL RESPONSIBILITIES

The impressive list of accomplishments of the agency over the last few years is indicative of the nationally critical activities for which the Commission has responsibility. It is essential that the CFTC have adequate resources now and in the future to address important issues and changing developments in the marketplace.

Over-the-Counter Markets

During recent years, attention has been focused on issues posed by increasing use of OTC derivative instruments. In October 1993, the Commission released a comprehensive report, *OTC Derivative Markets and Their Regulation*, which was the first major report by a financial service regulator on this topic. It's central conclusion was that, while no fundamental changes in regulatory structure appeared to be needed, greater coordination among federal financial regulators would help assure that federal oversight remains adequate.

In addition, the Commission has acted to provide legal certainty to the marketplace by implementing authority granted by

the FTPA to exempt from the CEA and Commission regulations certain classes of swap agreements, hybrid instruments, and energy products. The Commission also has proposed, in response to futures exchange petitions, a three-year pilot program that would allow certain contracts to trade on futures exchanges free of the some of the restrictions that ordinarily apply, when those contracts are traded solely among highly sophisticated participants.

To the extent that certain OTC products migrate to exchange markets, pursuant to the pilot program described above or because of market demand for greater transparency and liquidity, the Commission's oversight responsibilities will correspondingly increase. In addition, the Commission is monitoring proposals by the exchanges and others for the development of collateral management facilities or clearinghouse arrangements for the trading of swaps or other OTC derivatives. To the extent that these initiatives are successful, they could significantly lessen existing concerns over the level of credit risk in OTC transactions, and the translation of aggregate credit risk to the systemic integrity of the financial system. Moreover, these developments will place a significant burden on the Commission's oversight capabilities. The agency's retention of anti-fraud authority, regardless of the level of migration, will require the CFTC to use enforcement resources when necessary to investigate and prosecute fraud in this market.

The Commission is working actively with other regulators in the U.S. and overseas to attempt to coordinate regulatory policy in the OTC markets, both to ensure that policies are consistent and that participants choose markets for fundamental business reasons and not to escape oversight. The Commission has participated in the development of a statement of risk management principles issued by the International Organization of Securities Commissions. In addition, in March 1994, the Commission, along with the SEC and the U.K. Securities and Investments Board,

issued a Joint Statement that established an agenda for development of a coordinated approach to oversight of the OTC markets.

The Commission is a member, along with the Treasury, the SEC, and the Board of Governors of the Federal Reserve System, of the President's Working Group on Financial Markets ("Working Group"). The Working Group was originally formed to foster regulatory coordination in the wake of the 1987 stock market break. Consistent with a recommendation in the Commission's 1993 OTC derivatives report, the Working Group expanded its charter to encompass new developments in financial markets, including the growth of OTC derivatives. The Working Group is considering a wide range of OTC derivatives issues, including information access, market transparency, internal management controls and clearing facilities for derivatives. Among its most recent activities, in the wake of the disclosures of substantial losses by Orange County, the Working Group has been meeting with representatives of various state and local government associations to discuss means of sharing and disseminating information on, and to promote the use of, appropriate investment guidelines for use by governmental entities.

Internationalization

The global financial marketplace is becoming increasingly interlinked as world demand drives the growth of exchange derivatives markets. In response to this development, U.S. markets are forging trading and other linkages with their foreign counterparts. In addition, brokerage firms subject to our regulation are becoming increasingly multinational. Not only do they transact for their own account in markets worldwide but also serve a customer base in multiple markets, including emerging markets. To assure adequate enforcement of market, customer and financial protections in this increasingly international environment, the Commission must keep abreast of international developments, and frequently utilizes its various arrangements

with foreign regulators, which range from information sharing, joint enforcement activities, mutual recognition agreements and financial surveillance. The Commission also increasingly is requested to assist developing markets in their development of sound supervisory structures for futures trading. Such activities are not only important to proper supervision of our markets and brokers at home and to preventing financial malfeasors from escaping across borders, but also are vital to our competitive posture in the world.

Margin Authority

In a letter dated March 22, 1993, the Board of Governors of the Federal Reserve System ("FRB") delegated to the Commission the authority to review margin levels for stock index futures and options thereon and to report annually on the Commission's experience. The Commission has instituted review procedures and is now receiving exchange filings relating to stock index futures and options margin levels. During 1994, the staff reviewed changes to 39 levels of margin for stock index futures, pursuant to authority delegated to the Commission by the FRB. In its first report to the FRB, the Commission found that all exchanges with stock index futures contracts maintained margins at prudential levels appropriate to preserve the financial integrity of the exchange and its clearing house.

REGULATORY REFORM

The Commission is committed to a regulatory reform program that involves ongoing review of existing regulations with a view to eliminating unnecessary burdens and simplifying and clarifying regulations where possible consistent with the protection of investors and market integrity. For example, the Commission already has streamlined rules related to its customer reparations program and is in the process of simplifying and improving disclosure by commodity pool operators and commodity trading advisors.

To assure that our regulations continue to serve their purposes as efficiently and fairly as possible, I have written to major industry participants, asking them to identify regulatory issues of concern to them, regulations that create particular burdens for them, and any aspects of the existing regulatory framework that may be obsolete or outmoded. With the benefit of this input, I intend to convene a series of public roundtables over the course of the next two years to discuss aspects of the Commission's regulatory framework that may be improved, streamlined, or even eliminated, with the benefit of views contributed by a wide range of industry participants, including market users. We anticipate holding the first such roundtable in April of this year, to review disclosure issues relevant to commodity trading advisors and commodity pool operators.

In addition to continually reviewing our own rules and regulations, we are actively working with other regulators to ensure that where appropriate, regulatory requirements are consistent. For example, the Commission is working with the SEC to harmonize audit coverage, financial reporting, and certain other financial requirements relevant to firms licensed by both agencies. In the OTC area, as the result of joint encouragement by the SEC and CFTC, the six largest OTC derivatives dealers are engaged in voluntary initiatives in the areas of (1) improved regulatory reporting on OTC market activities, (2) capital devoted to OTC activities, (3) internal risk management controls, and (4) dealer-counterparty relationships. The Commission believes that promoting voluntary efforts to improve overall supervision of the marketplace and effective self-regulation can reduce regulatory costs and the need for legislative mandates.

CONCLUSION

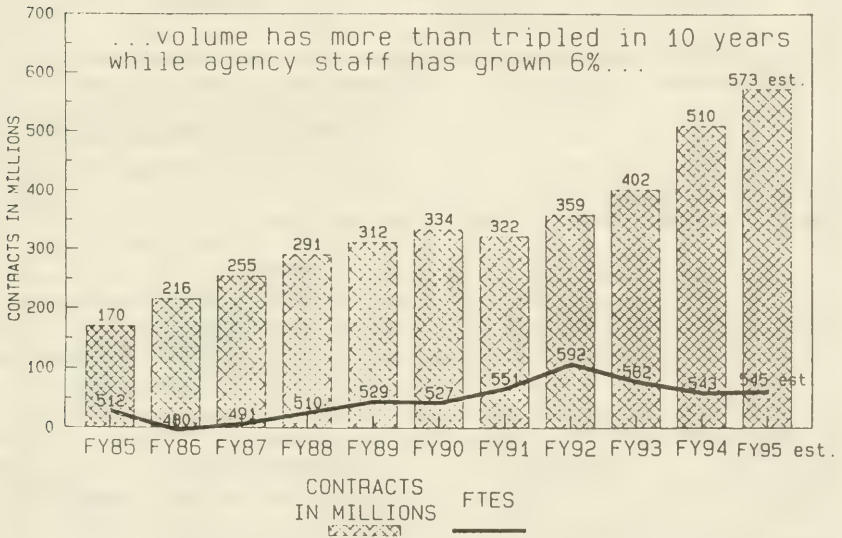
The Commission is committed to building on the achievements of the last several years to fulfill its congressional mandate to promote the integrity of the marketplace. However, to accomplish

this task, additional staff resources will be required just to keep up with the monumental growth that has occurred in the industry we regulate and the significant changes that have taken place in financial markets.

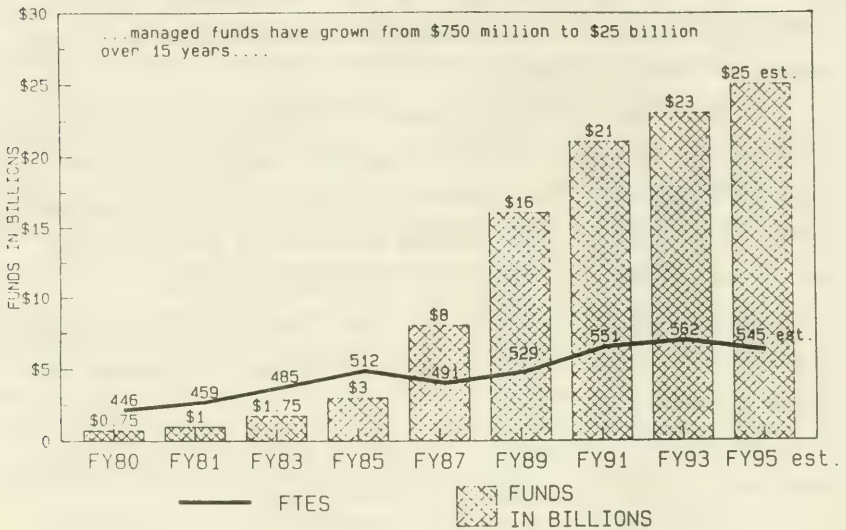
In this complex, rapidly changing financial marketplace, the Commission's role as a strong, independent regulator has never been more important. The Commission cannot effectively implement the responsibilities that Congress has given it and assume the new duties imposed by marketplace developments without an increase in resources. We believe that under these circumstances the increase called for in the President's budget is modest and fully justified.

Thank you Mr. Chairman. I would be pleased to answer any questions you and other committee members may have.

COMMODITY FUTURES TRADING COMMISSION
GROWTH IN VOLUME OF CONTRACTS TRADED
FY 1985 THROUGH FY 1995



COMMODITY FUTURES TRADING COMMISSION
GROWTH IN MANAGED FUNDS FOR FUTURES TRADING
SELECTED YEARS - FY 80 THROUGH FY 95



ALLOCATION OF REQUESTED STAFF

PROGRAM	STAFF INCREASE	FUNCTIONS
ENFORCEMENT	40	<ul style="list-style-type: none"> - INCREASED PROSECUTION OF SOLICITATION AND SALES FRAUD - INCREASE # OF TRADE PRACTICE INVESTIGATIONS - ENHANCE OTC ENFORCEMENT ACTIVITIES
MARKET SURVEILLANCE	7	<ul style="list-style-type: none"> - SURVEILLANCE - ANALYSIS OF NEW CONTRACTS & RULE CHANGES - OTC RESEARCH ISSUES
TRADING AND MARKETS	24	<ul style="list-style-type: none"> - RULE ENFORCEMENT REVIEWS - INTERMARKET COORDINATION - RISK ASSESSMENT - ASSESSMENT OF DERIVATIVES TRADING
ADMINISTRATIVE MANAGEMENT	4	<ul style="list-style-type: none"> - IRM SUPPORT - PERSONNEL SUPPORT
PROCEEDINGS	4	<ul style="list-style-type: none"> - ADDITIONAL ALJ AND SUPPORT STAFF
GENERAL COUNSEL	2	<ul style="list-style-type: none"> - COMMISSION OPINIONS - COOPERATIVE EFFORTS WITH OTHER REGULATORS - FOREIGN ASSISTANCE
AGENCY DIRECTION	1	<ul style="list-style-type: none"> - INTERGOVERNMENTAL AFFAIRS

BARINGS BANK FAILURE

Senator COCHRAN. In connection with your comments about the Barings Bank failure and the problems that has caused the Commission and your staff, what responsibilities does the CFTC have that are called into play in a situation like this? What has the staff been working so hard to do?

Ms. SCHAPIRO. When we learned on Saturday morning from fellow regulators, primarily the New York Federal Reserve, that there was a British merchant bank, Barings, in significant trouble and in danger of declaring insolvency, we brought the senior staff members into the office on Saturday and focused on a number of issues of direct relevance to the CFTC and to the United States customers and markets.

The first question we had was: Did Barings have large positions in U.S. markets, so that if they did declare bankruptcy, would U.S. futures exchanges be adversely impacted?

Through our large trader reporting system, we determined that Barings had very small positions in U.S. markets, nothing that would create a particular concern.

The second question we had was whether Barings had a U.S. futures commission merchant that would be carrying U.S. customer accounts and were those in danger. We determined very quickly that Barings did have a U.S. FCM. It was not active. It had no customer accounts and about \$400,000 in capital.

The next concern we had, and this is an ongoing concern that has involved extensive discussion with foreign regulators, is what was the impact on U.S. firms that were clearing their foreign exchange business through Barings in other markets. If they had positions for customers, we would hope that those funds would be segregated and ultimately positions and funds movable under the foreign regulatory scheme. We continue to work with the Japanese, Singaporeans, and the British regulators on getting United States customers' positions moved, even though accounts have been frozen and money has been frozen in the United Kingdom, Singapore, and Japan.

The next concern we had was what if the Nikkei, as a result of Barings failure, took a large dive, a 5- or 10-percent loss in value of the Nikkei index? What would be the impact on U.S. firms that, unrelated to Barings, had large positions in the Nikkei contract, perhaps on the Chicago Mercantile Exchange?

Again, using the large trader reporting system, we were able to identify every customer, firm, and end-user customer, that had more than 50 Nikkei contracts in the United States.

And then, with respect to the firms, we were able to do a projection analysis and look at what would happen to their net capital if there were a 5- or 10-percent move in the Nikkei. And we felt very comfortable with the capitalization level of our firms as a result of that.

And then finally, what we worried about was if Barings defaulted in the Singapore market. There are subsidiaries of United States firms that are also clearing members on the Singapore exchange. If Barings' loss was large enough under the SIMEX's rules, at some point it would be possible for SIMEX to assess those clearing mem-

bers to cover Barings' losses. We worried about what the impact of that might be on the United States parent of those subsidiaries clearing in Singapore. We were able to do an analysis of that and talk extensively to other regulators. In fact, I woke up senior members of the Monetary Authority of Singapore on Monday night to talk about what the impact would be and whether there likely would be an assessment of United States firms to cover Barings' losses. We are quite comfortable that there are still sufficient margins, even though all of the Barings' positions in Singapore have not been unwound, to cover those positions at this point.

So it has been very intensive dealing with our own exchanges, reviewing margin levels on the Chicago Mercantile Exchange, and dealing with the United Kingdom, Japanese, and Singaporean regulators and exchanges.

Senator COCHRAN. Does this indicate the need for more or tighter regulation of the international derivatives markets by CFTC or by the traders who may be engaged in this same kind of activity?

Ms. SCHAPIRO. I think that it is not at all clear what really happened in Singapore yet. I saw on the wires this morning that during the night, the finance minister of Singapore reported to the Parliament that they were undertaking a very careful review of their rules and regulations and that they would be seeking the assistance of foreign regulators in doing that. I think that is a very good sign.

But I think one thing is clear, and that is that there was a dramatic failure of internal controls at Barings. There is clearly a lesson to be learned, and I hope that that is something that we can play a role in doing in this country.

I think when this has all blown over and we are past the crisis stage—we have positions moved, positions liquidated, funds released—we will do a postmortem and see what other kinds of international regulatory cooperative efforts might have made this a little bit easier.

But on balance, I have to say that I think so far, it has gone quite well in terms of working with U.S. regulators, with whom we have been in extensive contact over the last 3 days but also within the international regulatory community.

OVER-THE-COUNTER DERIVATIVES

Senator COCHRAN. There has been a substantial growth in the swaps market and other over-the-counter derivatives trading.

Has that resulted in any appreciable change in the responsibilities of the CFTC in terms of staff needs, and does that have a correlation to your budget request?

Ms. SCHAPIRO. Yes; it does, Mr. Chairman. As you know, as a result of the Futures Trading Practices Act, the CFTC was granted exemptive authority with respect to swaps transactions. And we have exempted swaps from regulation under the Commodity Exchange Act. The agency did, however, reserve antifraud authority, and the best evidence of our use of that authority is the case we filed jointly with the SEC against a Bankers Trust Co. subsidiary for fraud in the sale of certain over-the-counter derivatives. But it is terribly important that we keep up with developments in the over-the-counter derivatives markets, that we be constantly alert to

problems that may arise, and that we work with the firms on issues like management controls and supervisory reporting. A specific number in our budget request for this year is devoted to over-the-counter market developments and economic analysis, risk assessment, product monitoring, and enforcement.

REGULATORY REFORM

Senator COCHRAN. I know when you were before the Agriculture Committee I had a chance to ask you about the plans that you might have to try to review, for the purpose of identifying those which are costly and unnecessarily burdensome, regulations that are imposed on those that you have the responsibility to regulate.

To me, part of regulatory reform is a new review for the purpose of finding out if there are regulations on the books now that are unnecessarily burdensome or costly that could be changed or modified in a way to eliminate unnecessary expense.

Is any such review underway now? And do you think that will produce changes in regulations that will eliminate unnecessary burdens or costs?

Ms. SCHAPIRO. Yes, Mr. Chairman; we have several layers of review ongoing. One is an intensive review of our enforcement program, so that we can most effectively allocate resources in that area.

Second, very shortly after I arrived at the Commission in October, I requested quarterly meetings with all of the exchanges, trade associations, and in fact many of the agricultural groups to talk about the issues that were of particular concern to them in the context of the CFTC's regulatory program. We have had meetings with every group at least once, and with most groups, we have had many meetings.

The next thing that we decided to do was to take advantage of the expertise of members of the industry in identifying issues in our regulatory program that created particular burdens for them or particular concerns. In that context, I wrote to most industry leaders and asked them to provide us with a list of issues that they would like the agency to focus on, with a view toward streamlining, modifying, or deleting regulations. We will hold a series of roundtables, pulling in the best experts from the industry and academia, market participants, and other regulators, when appropriate, and talk about how to improve specific regulatory rules and requirements. The first such roundtable will be held in April, and the subject matter for that is commodity pool performance and disclosure issues that are related to the commodity trading advisor and the commodity pool industry.

So we have attacked this issue on a number of fronts. And I think that by focusing on specific issues with the appropriate experts, we will actually be able to make some very substantial progress in streamlining our regulatory approach.

Senator COCHRAN. Well, I commend you for the initiative and compliment the aggressive way you are going about it.

Ms. SCHAPIRO. Thank you.

SUBMITTED QUESTIONS

Senator COCHRAN. There are a number of other questions on other topics that I would like to ask. But rather than do that at this point, I think I will submit them to you in writing and ask for you to respond for the record, so we will have a complete record, particularly on the need for the additional staff that you talked about and the overall request for funds for the next fiscal year.

Ms. SCHAPIRO. We will be pleased to provide answers to all the questions.

Senator COCHRAN. Ms. Schapiro, thank you very much. We appreciate your cooperation with the committee. Thank you.

Ms. SCHAPIRO. Thank you, Mr. Chairman.

[The following questions were not asked at the hearing, but were submitted to the agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

PROPOSED TRANSACTION FEE

Question. The President's budget proposes legislation to establish a transaction fee on commodity futures and option contracts traded on futures exchanges to cover the cost of the Commission's regulatory activities. For 1996, the budget indicates that the fee would be set at 10 cents per round turn transaction and would generate sufficient collections to fully offset CFTC's fiscal year 1996 appropriations request. Chairman Schapiro, do you support this transaction fee proposal?

Answer. Neither I nor the Commission has taken a position on this particular proposal. I believe that current funding and staffing levels limit the Commission's ability to fully carry out its Congressional mandate and increasing responsibilities. I also recognize the severe budgetary constraints facing the Congress this year. I want to work with the subcommittee and others in Congress to find a way to obtain the necessary funding.

Question. Industry opponents argue that taxing U.S. futures transactions would force much of the U.S. futures business to shift overseas and over-the-counter derivatives (OTC) markets causing a further decline in the U.S. share of world futures markets. In fact, industry members have pointed out that 19 of 21 countries that currently have futures exchanges do not tax transactions, and that one of the two countries that does--Hong Kong--has lost volume. Do you share this view that a transaction fee could have a negative impact on the competitiveness of U.S. futures exchanges?

Answer. The volume of trading on U.S. markets has more than tripled in the last ten years. Despite this enormous growth, the U.S. market share has decreased as futures trading, largely following the U.S. model, has been developed in many other countries. As part of the Futures Trading Practices Act of 1992, the Commission completed its Study of the Global Competitiveness of U.S. Futures Markets and found no regulatory impediments to U.S. markets and, indeed, it is clear to me since the collapse of Barings PLC that our regulatory system is one of our market's great strengths and attractions for investors. It is extremely difficult to predict the impact of a transaction fee on volume in the futures markets. Adding to the cost of doing business could decrease demand, but, on the other hand, the U.S. markets would continue to have many advantages over their foreign counterparts. Not only are the U.S. futures markets the most liquid in the world, but they are the most carefully regulated. Customers trading in our markets can rest assured that their funds are secure and they will receive fair treatment. That assurance of market integrity is a powerful incentive for traders to continue doing business in the U.S. Cost alone is not determinative of where business is transacted.

It is difficult to compare fees among various world markets, because there are a variety of fees assessed by the regulators. While transaction fees may not be assessed by most foreign futures regulators, in general, these regulators are partially or fully funded by their regulated entities. This form of funding also is common among the U.S. financial regulators except for the CFTC.

Question. I understand that the futures industry already pays 14 cents per transaction to fund the self-regulatory programs of the National Futures Association (NFA). As I understand it, the over-the-counter derivative markets are not subject to this NFA fee and would not be subject to the proposed transaction fee. Has the 14 cent NFA fee resulted in a shift to over-the-counter derivatives and overseas markets?

Answer. The evidence does not support the suggestion that NFA fees shift business to alternative markets. In 1983, the first full

operating year of the NFA, it charged a fee on public customers at the rate of 33 cents per round turn transaction. After imposing the transaction fee of 33 cents, exchange trading volume increased by over 27% to 138 million contracts in 1983 from 108 million contracts in 1982. In the last 10 years, the trading volume has more than tripled, which has allowed the NFA to lower the amount of its transaction fee. Currently, the NFA charges a 14 cent transaction fee on trades by all public customers.

Question. When will the Administration submit its fee proposal to the Congress?

Answer. I do not know when the Administration intends to submit legislation on the fee proposal.

Question. I note from the President's budget that the proposed authorizing legislation would in the future years give appropriators the ability to adjust the fee in order to match the Commission's appropriated level. Would you please explain this aspect of the proposal more fully.

Answer. I understand that the Administration is working on the details of the proposal in anticipation of legislative action. However, my general understanding is that the authorizing legislation would give appropriators the ability to adjust the fee annually based on estimated trading volume to match the Commission's appropriated funds level. The fees would be credited to the appropriations as offsetting collections, resulting in a zero appropriation.

CFTC/SEC MERGER

Question. Legislation has again been proposed in the House to merge the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC). I understand that you have indicated that you do not support this proposal. Would you please explain why.

Answer. The statutes establishing the CFTC and the SEC have fundamentally different purposes. In creating the CFTC as an independent agency in 1974, Congress determined that the regulator for commodity futures and options--risk-shifting instruments--should not be part of an agency regulating the underlying cash markets, whether that agency is the SEC, the Department of Agriculture or the Department of Energy. Congress recognized that price neutral regulation of risk-shifting activity would suffer if placed within a larger agency with different or conflicting priorities.

Moreover, several factors argue against this proposal. First, focusing on complex jurisdictional questions will divert attention and energies away from pressing issues, including rapid developments in the over-the-counter (OTC) derivatives markets. Concerns raised by OTC derivatives are by no means limited to matters committed to the oversight of either the CFTC or the SEC. The universe of OTC derivatives includes products that may not be regulated under either regulatory framework. Further, to the extent that a merger between the CFTC and SEC is viewed as a means to eliminate regulatory duplication, overlap between these two regulatory regimes constitutes only a small fraction of our jurisdictions, and both statutory schemes would continue to be needed.

As a separate matter, the exemptive power Congress granted to the CFTC in 1992 has substantially reduced the potential for the exchange-trading requirement of the Commodity Exchange Act (CEA) to impede the development of innovation in the over-the-counter market. In general, Section 4(a) of the CEA requires that domestic trading of futures occur exclusively on designated contract markets. Section 4(c) allows the Commission to exempt new products from regulatory oversight when it determines that an exemption is in the public interest. As intended by Congress, Section 4(c) has been used

successfully to promote market certainty and to alleviate the potential adverse market impacts of the CEA mandatory exchange-trading requirement. Should a new product's characteristics result in conflicts between the respective mandates of the CFTC and the SEC, or any other regulator, or between the CFTC and an unregulated market sector, in most cases, Section 4(c) provides the CFTC with the necessary flexibility to resolve those conflicts.

Further, ongoing cooperative efforts among financial regulators, whether specifically targeted to areas of regulatory overlap or potential conflict, or conducted for enforcement or information-sharing purposes, have eliminated the need for regulatory consolidation. The CFTC participates in the President's Working Group on Financial Markets, the Working Group on Treasury Market Surveillance, the Inter-market Surveillance Group, the Inter-market Financial Surveillance Group, the Joint Compliance Committee, the Clearing Organization and Clearing Bank Roundtable, the Joint Audit Committee, the Securities and Commodities Fraud Working Group, the Telemarketing Fraud Working Group, and working groups established by the Market Improvements Committee, on which Commission staff participate as observers. One notable recent example of cooperation was the institution by the Commission of parallel enforcement proceedings with the SEC and the Federal Reserve Board against BT Securities, in December 1994.

Finally, and perhaps most importantly, the futures and options markets serve a price discovery function that is unique to those markets and vital to the U.S. economy. That function underscores the need for an agency whose central mission is to ensure that the prices disseminated by the exchanges accurately reflect the forces of supply and demand. In the Commission's view, the public interest is best served by a strong independent agency, such as the CFTC, whose primary focus is just that.

Question. What cost savings could be achieved by such a merger?

Answer. Cost savings may prove illusory. When both agencies operate efficiently, as they currently do, the number of staff needed to carry out the combined functions of the merged agency would be the sum of the current program staffs of the separate agencies. Further, assuming that the number of support or administrative personnel is reasonably related to the level of program staff, the actual savings in this area would not be great. In fact, there could be significant costs associated with the implementation of the merger.

Question. Do you share the view expressed by some futures industry sources that such a merger would put the futures industry at a disadvantage?

Answer. Yes, I agree with those who believe that a CFTC and SEC merger would put the futures industry at a disadvantage. The existing system of two separate agencies reflects Congressional understanding of the differences between the basic mission of the SEC and CFTC. Commodity futures and option contracts are, and historically have been, risk-shifting instruments. In contrast, securities have historically been capital formation vehicles. The existing regulatory structures for commodity futures and options and for securities have developed due to the disparate missions of the agencies and the industries they regulate.

At the CFTC, futures and options and other derivatives are the primary focus. For example, the CFTC focuses particular attention on each category of commodity futures: agricultural, precious metals, natural resources, and financial. Merger of the CFTC with the SEC might tend to reinforce the attention paid by the larger regulator to those markets common to both former organizations, at the expense of those markets, agricultural futures, for example, which are unique to the CFTC. In a merged environment, effective futures oversight and regulation would have to compete for resources which I believe would

tend over time to be increasingly devoted to securities market oversight.

COMPETITIVENESS OF U.S. MARKETS

Question. Despite robust internal growth, I understand the U.S. share of world futures markets has steadily declined. What factors are motivating the faster growth in overseas futures markets, and what is being done to strengthen the competitive posture of the domestic industry? Is there anything the CFTC can or should do to counteract this trend?

Answer. One of the central findings of the Commission's competitiveness study is that the decrease in the U.S. exchanges' share of the continually increasing world futures trading volume is not due, fundamentally, to direct competition from foreign markets. Instead, it is caused by the emergence of new markets that successfully satisfy local risk-management needs in foreign jurisdictions. This finding is consistent with the continuing strong growth in trading activity in both foreign and U.S. futures markets.

Specifically, the growth of futures trading activity abroad has been concentrated in markets tailored to local industries or instruments and denominated in the currency of the home country, rather than in commodities underlying contracts that are the same as those on U.S. exchanges. In that regard, the contracts primarily traded on leading foreign markets are based on foreign government debt and other foreign-based financial instruments as well as tangible commodities indigenous to the home country. Also, as lesser-developed jurisdictions in Europe, Asia, and Latin America move toward more market-oriented economies, capital markets and commodity exchanges have formed as a natural outgrowth of that transition.

There are two principal prerequisites for maintaining the competitiveness of U.S. futures markets vis a vis their foreign counterparts. First, U.S. exchanges must continue to develop and promote innovative futures and option products that provide significant risk-shifting potential for both domestic and international firms and institutions. Second, the Commission must continue to strive for regulatory innovation consistent with our responsibilities to assure market integrity and customer protection.

NEW CONTRACTS

Question. Concerns have been expressed in the past about the time that is taken by the Commission to approve new contracts for trading on one of the exchanges. What has the Commission done to address this concern?

Answer. To address concerns related to the processing time for new contracts, the Commission in recent years has adopted numerous revisions to its regulatory requirements, as well as a number of changes to internal operational procedures, to streamline or otherwise enhance its review procedures. Specifically, CFTC Guideline No. 1, Economic Requirements for Contract Market Designation, was revised in January of 1992 to significantly reduce the exchanges' filing requirements and the CFTC staff's review time. The revised requirements ensure that the scope of the exchange justification and CFTC staff review are focused primarily on contract terms that relate to the susceptibility of the contract to manipulation, price distortion, or congestion. Further, for options on futures, the revised guideline incorporates a checklist format which requires no explanation or justification by the exchange or Commission staff. The CFTC adopted internal guidelines to ensure that new contract proposals are published almost immediately and that substantive issues are identified and communicated to the exchange on a timely basis for prompt resolution.

As a result of the initiatives, the Commission has been able to approve the record number of new contracts submitted for approval in recent years. These include entirely new products, such as contracts on air pollution allowances, crop yield, homeowner's and catastrophe insurance, cross-currency rates, fertilizers, shrimp, dairy products, and various broad-based or commodity-specific indexes.

Moreover, the total review time for new contracts has declined significantly over the past several years and currently averages less than three months. For example, the average processing time for futures contracts fell from 151 days in 1990 to 89 days in 1994. During the same period, the average time for review of options contracts fell from 134 days to 78 days. The number of designation applications under review has fallen sharply from 30 at the end of fiscal 1990 to two at the end of fiscal 1993, and six at the end of fiscal 1994.

Question. The CFTC recently approved for trading on the Chicago Board of Trade certain crop insurance futures and option contracts. What is the nature of these proposed contracts and their intended use?

Answer. The contracts, which were approved by the Commission on February 23, 1995, consist of crop yield futures and options contracts for corn in Iowa, soybeans in Illinois, winter wheat in Kansas and spring wheat in North Dakota. The contracts are designed to reflect variations in the bushels per acre yield for each of these crops in the specified states. The futures contracts are cash settled based on estimates of the yield per harvested acre for each of these crops and states reported by the National Agricultural Statistics Service of the U. S. Department of Agriculture (USDA).

The Chicago Board of Trade (CBT) stated in its application that the contracts potentially can be used by crop insurance companies to hedge insurance policies issued to producers against the risk of crop losses due to various factors including drought, hail, floods, and disease. The CBT also indicated that the contracts may be used by grain merchants, grain transportation companies, and financial institutions to hedge risks associated with variations in crop production levels. The USDA indicated that crop yield option contracts could provide an effective way for crop insurance companies to hedge risks that are not borne by the Federal Crop Insurance Corporation under its reinsurance agreements with such companies. The USDA also indicated that area yield options may be used by elevators, barge, and railroad firms as well as other grain and oilseed handlers to hedge risks associated with year-to-year variations in the quantity of grain or oilseed handled by such firms.

Question. In connection with the currency crisis involving the Mexican peso, I understand that there is a Mexican peso futures contract that has been proposed. What is the status of this proposal, and what could this kind of contract potentially do to limit the destabilizing effects such as those witnessed in recent weeks?

Answer. The Chicago Mercantile Exchange (CME) and the New York Mercantile Exchange are currently designated by the Commission in Mexican peso futures contracts. However, both of these contracts are dormant and cannot be listed for trading without prior Commission approval.

On January 13, 1995, the CME submitted a proposal to reactivate trading in its dormant Mexican peso futures contract, as well as proposed cash-settled Mexican peso futures and option contracts. On that date, the CME also submitted an option-based proposal on its existing physical delivery of Mexican peso futures contract.

The Commission's staff currently is evaluating the CME's proposals, as well as the effect of recent actions taken by the Bank

of Mexico to liberalize restrictions on Mexican peso currency trading. The staff will consider comments from interested parties, including commenters responding to the Federal Register notice, in making its recommendation. The Commission anticipates taking final action in the near future.

In general, foreign currency cash markets are much larger and more liquid than foreign currency futures markets. However, currency controls in the Mexican peso have restricted transactions in the Mexican peso cash market. The CME's proposed contracts would broaden the range of hedging vehicles available for the large number of U.S. entities with exposure to the Mexican peso. Such contracts would facilitate business transactions and international investments, since the risk of Mexican peso currency exchange fluctuation could be hedged with the use of this instrument.

FEEES FOR COMMISSION EVENTS/SYMPOSIA

Question. The fiscal year 1995 appropriations act contains language requested by the Commission to enable it to charge reasonable fees to cover the cost of Commission-sponsored educational events and symposia. What level of fees have those attending these events had to pay to enable the Commission to cover the costs of sponsoring these events?

Answer. This authority was granted to the CFTC effective October 1, 1994. The Commission has not yet used this new fee authority since the only symposium that has been held in fiscal 1995 took place in November 1994 and all the arrangements were completed prior to the Commission receiving this authority.

ENFORCEMENT STAFFING

Question. The explanatory notes indicate that the Commission's fiscal year 1995 budget "forces a reduction of two staff years in the Enforcement Division's authorized FTE level." It further states that the Commission will seek to implement its fiscal year 1995 budget through staff attrition. However, I note from the summary table of page 16 of the explanatory notes that the enforcement staffing level for fiscal year 1995 has actually been increased by 2 full-time equivalent (FTE) from the fiscal year 1994 level and that total staff years allocated to the enforcement program have increased by 7 FTE positions from the fiscal year 1994 level. Would you please explain this discrepancy.

Answer. With regard to the difference of 2 FTEs, a distinction must be made between actual FTEs used and FTEs authorized for use. The narrative on page 45 refers to authorized FTEs while page 16 refers to actual FTEs used in fiscal 1994. In 1994, 149 FTEs were authorized for the Division of Enforcement but due to an internal hiring freeze and normal turnover, the actual number of FTEs used was 145. In comparison, the fiscal 1995 authorized FTE level is 147--2 FTEs below the fiscal 1994 authorized level but 2 FTEs above the fiscal 1994 level actually used.

The increase of 7 FTEs shown for the enforcement program reflects the increase of the 2 FTEs discussed above as well as an increase of 5 FTEs allocated to the enforcement program for agency direction and support.

Question. The fiscal year 1996 request proposed a 40 staff-year increase for the Commission's Enforcement Division. The explanatory notes indicate that these resources would be added in conjunction with an examination and reorganization of the Division to ensure that they are used in the most efficient manner possible. What has prompted the need for this examination and reorganization of the Commission's Enforcement Division?

Answer. I believe that market integrity requires a strong

enforcement program. Given our limited resources and my desire for a strong enforcement program, I instituted a top to bottom review of the Division of Enforcement on the day I arrived at the Commission. The purpose of this review was to identify ways in which the agency could more effectively focus its resources in the enforcement area. Specifically, we are identifying ways to streamline decision-making and to make the overall enforcement program more efficient and cost-effective.

Question. Do you believe changes are needed in the CFTC's enforcement program?

Answer. Yes, I believe we can make some organizational and operational changes that will improve the effectiveness of our enforcement program. Notwithstanding these organizational changes, given the extraordinary increase in business conducted by regulated exchanges, additional resources are required if the Commission's enforcement program is to provide a fully effective deterrent against fraud and other abuses in the marketplace.

COMMISSION STAFFING

Chairman Schapiro, you have indicated that over the last ten years, exchange futures and options trading volume has tripled while Commission staff has risen by just six percent. For fiscal year 1996, the Commission is requesting a staff ceiling of 627 full-time equivalent positions, a 15 percent increase from fiscal year 1995 level. The highest staffing level reached by the Commission over the past ten years was in fiscal year 1992, when the Commission was at a 592 FTE position level.

Question. How many functions has the Commission transferred to industry self-regulators over the past ten years? How many staff years did the Commission allocate to perform these functions before they were transferred?

Answer. Declining resources, downsizing, and streamlining efforts have required the Commission to transfer several functions to industry self-regulators over the past ten years. The self-regulatory organizations (SROs) are the futures exchanges and the National Futures Association (NFA). In 1983, the NFA was authorized to perform registration processing functions for futures commission merchants (FCMs), introducing brokers (IBs), commodity pool operators, commodity trading advisors and associated persons (APs) of each of these categories. In 1986, the Commission authorized the NFA to perform registration processing functions for floor brokers and temporary licenses for guaranteed IBs. In 1988, the Commission expanded this authority to include requests for withdrawal. In 1989, the registration of leverage transaction merchants (LTMs) and associated persons of LTMs was transferred, and in 1993, the registration of floor traders was transferred.

The Commission also has transferred to the NFA, in stages over the past ten years, authority to take adverse registration actions including the denial, conditioning, suspension, revocation or restriction of registration.

Before the transfer of these functions to the NFA began in 1983, the Commission allocated 51 staff years to registration processing and adverse action functions. Twenty-three of these staff years consisted of temporary personnel that were added to handle expanded registration processing requirements begun in 1983, including sponsorship of APs and fingerprinting, and in anticipation of the function being transferred to the NFA. Since the majority of registration processing was transferred to the NFA in 1983 and 1984, the Commission allocated only twenty staff years to perform the registration processing and adverse action functions in 1985, and this staffing level has continued to decline due to the transfers of functions described above. Currently, the Commission allocates

approximately five staff years to processing registrations and reviewing NFA's adverse actions with respect to floor brokers and floor traders.

In the financial and sales practice compliance area, on July 29, 1985, the Commission transferred to the NFA and the futures exchanges the function of performing routine auditing of FCMs for compliance with requirements concerning minimum net capital, segregation of customer funds, financial reporting and related record-keeping. The Commission's Division of Trading and Markets issued Financial and Segregation Interpretation No. 4-1 on July 29, 1985 to provide guidance to these SROs in performing these functions. The Commission continues to perform some direct auditing of FCMs as a quality control check on the performance of the SROs. The Commission allocated approximately 20 staff years for routine direct auditing of FCMs before that function was transferred. The Commission's current limited direct audit activity accounts for about seven staff years, approximately one-third of the amount allocated ten years ago.

In Interpretive Letter No. 85-17 issued September 10, 1985, the Commission also transferred to the SROs the authority to approve prepayments of FCM and IB subordinated debt. The Commission allocated 0.1 staff years to that function prior to transfer.

Sales practice audits of FCM's and IB's were transferred to the SROs in 1986. Prior to transferring that function, the Commission allocated three staff years to this function.

Beginning on July 2, 1993, the Commission, by agreement with the exchanges, transferred the responsibility for the collection of data for and publication of the weekly stocks of grain report. Collection of this information involved requesting weekly reports from grain elevators concerning different types and classes of grain that were in storage. Approximately 0.4 staff years were allocated to these functions.

In 1994, the Commission proposed changes to its rules governing ethics training for registrants. Among other things, this proposal would effectively permit the transfer to a registered futures association, such as the NFA, of responsibility for reviewing applications by persons seeking to provide ethics training and establish criteria under which this responsibility would be exercised. This proposal would replace the current procedure, to which the Commission allocates approximately one staff year, whereby an application to provide ethics training is reviewed by the Commission.

Through the years of transferring functions to the NFA, the CFTC has been able to reassign staff to higher priorities and not request as large a growth in our budget requests as otherwise would have been the case.

Question. To what extent has the Commission increased its efficiency and effectiveness through computerization and other modernization efforts? What staff year savings have resulted from these changes?

Answer. Over the last ten years, the Commission has vastly increased its efficiency and effectiveness through computerization and other modernization efforts. At the beginning of 1985, the Commission used approximately 12 personal computers for spreadsheet applications with no networking capabilities. The Commission's mainframe computer supported approximately 100 non-intelligent terminals, four printers, a data entry mini-computer and two personal computers. The mainframe computer was used to operate the large trader reporting system twice per day--once for the New York markets and once for the other markets--in addition to the Commission's fiscal accounting system.

The Commission's current mainframe computer and enhanced communications capabilities have greatly increased the efficiency at

the CFTC and many of its regulatees. For example, commodity exchanges and FCMs file electronically most of their required reports to the CFTC. This capability eliminates errors and reduces preparation and processing time resulting in better surveillance of the markets. Also, the current system includes enhanced statistical tools and query systems to analyze trading and perform ad hoc inquiries into specific markets or large traders.

The on-line storage capabilities also have been greatly expanded. This allows the surveillance economists to have more historical data on-line for research and analysis. In addition, the exchanges' databases of trade register data covering every trade made on a particular exchange allows detailed review of individual trades and supports trade practice investigations and analysis that was impossible ten years ago.

The other significant automation enhancement at the CFTC is the installation of personal computers (PC's). These PC's replaced non-intelligent terminals attached to the mainframe computer. The PC's allowed networking among the staff nation-wide and downloading of large quantities of data for further analysis. The PC's also provided the staff with powerful software tools to greatly enhance their efficiency and productivity.

I cannot reliably estimate the number of additional staff years that would have been required in the absence of these changes. To a large extent, the changes, apart from increasing efficiencies, were necessary in order to keep pace with the increasing automation and speed of transactions on regulated markets. In addition, certain of the Commission's resource needs, for example, the need for additional enforcement staff to conduct investigations, cannot be satisfied through further automation or enhancement of computer capabilities.

Question. How have resource constraints on the Commission, especially reduced staffing levels, affected the Commission's effectiveness in monitoring the significant growth in the industry, as measured by volume of trading?

Answer. I believe the Commission has done a very effective job of carrying out its responsibilities with strained resources. We have sharply curtailed our administrative overhead, and we have made extensive use of automation in both our internal and external reporting and monitoring systems. While we do not believe there have been any problems that have gone undetected, the CFTC cannot continue operating in this mode over the long run. Furthermore, the over-the-counter derivatives market continues to show explosive growth and demand increased attention by the CFTC and other Federal financial regulators. International market events such as the Barings Bank collapse necessitate intensive high level staff time almost 24 hours a day due to the different time zones and the large number of markets and regulators involved. These types of crises significantly impact our short term ability to carry out our day-to-day responsibilities and demonstrate why it is essential that the Commission obtain the resources necessary to fulfill its important mission.

MARKET SURVEILLANCE STAFFING

Question. Chairman Schapiro, you indicate in your testimony that the Commission's market surveillance staff has been reduced by 25 percent since 1980 (from 79 to 60 FTEs), while the number of active contracts under staff review has increased by 126 percent (83 to 188). The budget indicates that market surveillance staffing will increase from 62 FTEs in fiscal year 1994 to 64 FTEs in fiscal year 1995, to a proposed level of 69 FTEs for fiscal year 1996. Will the increased staffing level proposed be sufficient to monitor active contracts?

Answer. In the context of the current budget environment, I believe these requested staff increases for market surveillance will be adequate. In the past 15 years, the market surveillance staff

achieved significant economies through the extensive automation of their routine data collection and analysis function. This automation permitted the elimination of a large number of clerical support positions. The staff will continue to seek ways to perform market surveillance in an effective and efficient manner. However, changes in the amount of participation by users of new and diverse markets, or other market developments could lead to a need for further augmentation of market surveillance staff.

AGENCY DIRECTION PROGRAM STAFFING

Question. The Commission is requesting one additional staff year for a Congressional Liaison/Intergovernmental Specialist in its Agency Direction Program. It appears that this additional staff year may have been requested in anticipation of a longer, more complex reauthorization process. Now that the Senate has passed a simple five-year extension of the Commission's authorization and it appears that the House will do the same, do you believe this additional staff year is still required? If so, why?

Answer. The Commission has requested one additional staff year for its Office of Legislative and Intergovernmental Affairs. This request was made, in part, in anticipation of the need for additional consultation and interaction with members and staff of the Commission's oversight and other committees on over-the-counter derivatives, regulatory reform, and other issues. In addition, apart from legislative responsibilities, the office serves as the primary vehicle for coordination of Commission regulatory policy with other regulatory agencies, including through vehicles such as the President's Working Group on Financial Markets. This function is particularly important in light of the increasing attention devoted by all financial service regulators to the risks posed by over-the-counter derivatives activities.

Question. How many staff years are currently allocated to the Commission's Congressional liaison operations?

Answer. I expect to expend approximately two-and-one-half staff years in the office of Congressional Liaison/Intergovernmental Affairs this year. I estimate that the responsibilities of this staff year would be equally divided between legislative and intergovernmental activities.

OBJECT CLASS INCREASES

Question. I note from the object classification table on page 17 of the explanatory notes that the fiscal year 1996 request proposes a 21 percent increase from the fiscal year 1995 level in funding for "travel and transportation of persons"; a 29 percent increase in funding for "rental payments to others"; a 37 percent increase in funding for "other services"; an 18 percent increase in funding for "supplies and materials"; and a 65 percent increase in funding for "equipment". Would you please explain the reasons for the increases proposed for fiscal year 1996 in funding in each of these object classes.

Answer. Over the past three years, the CFTC has sharply curtailed all of its overhead expenditures. This request restores some of these accounts to a more effective level.

The increase for travel and transportation of persons is to provide the travel expenses of 82 additional FTEs requested in fiscal 1996 and to cover inflation. Travel costs represent approximately 1.5% of the Commission's appropriation in both fiscal years 1995 and 1996.

The increase in object class "rental payment to others" is to cover the cost of additional space for a portion of the 82 additional FTEs requested and to cover the inflationary or contractual increases

of lease agreements. The Commission recently executed a new 10-year lease agreement for our headquarters office space. The costs per square foot, while below the prevailing market rate for similar space, are nevertheless higher than the rates negotiated some 20 years ago and paid through fiscal 1995. The Commission also is in the early years of new lease agreements in the New York, Los Angeles, Kansas City and Chicago regional offices which for the same reason has resulted in higher annual lease payments in those offices.

In the object class "other services," the increase is primarily to cover the cost of ADP systems analysis and programming. The Commission contracts for these services to augment staff resources in the design, analysis and maintenance of over 40 systems needed to perform Commission work.

In the object class "supplies and materials," approximately half of the cost is to provide for the increased office supplies associated with the additional 82 FTEs and the balance is to cover the anticipated rate increase for periodicals and subscriptions.

In the object class "equipment," the increase is for the purchase of computer hardware to begin implementing the new client-server architecture. This hardware is necessary to provide computer support for the increasing volume of data processing. The principal sources of increased workload are trade practice investigations and economic research.

Question. The object classification table also reflects a substantial increase in funding between fiscal years 1994 and 1995 for benefits for former personnel and for printing and reproduction costs. What are the reasons for these increases?

Answer. The increase in funds requested for benefits for former personnel relates to the potential annual claim by the U.S. Department of Labor's Unemployment Insurance Service for reimbursement of unemployment benefit claims made by former employees. It is difficult to estimate with any degree of precision the magnitude of the potential annual claim. The fiscal 1995 estimate of \$58,000 is based on a recent historical high of \$58,000 in fiscal 1992. This estimate accounts for the fact that the Commission's staff has decreased by 8% in the last three years while unemployment costs have increased.

The increase for printing expenses in fiscal 1995 is to provide for a continuation of the usual level of activity in this object class. With the exception of fiscal 1994, the Commission has recently averaged annual obligations of \$235,000 for printing activities in recent years.

Question. The CFTC estimates that it will receive \$48,000 in reimbursable funds in each of fiscal years 1995 and 1996. To which object classes will these reimbursements be applied?

Answer. The CFTC has experienced an increase in the number of requests made by foreign governments for expert experience and secondments of senior staff to assist in reviewing and defining their regulatory structures and issues. When honored, the travel costs associated with requests of this nature are reimbursable to the CFTC and comprise the majority of the reimbursable funds handled at the CFTC.

MATERIAL SUBMITTED SUBSEQUENT TO CONCLUSION OF HEARING

[CLERK'S NOTE.—The following letter and press release were not presented at the hearing, but were submitted to the subcommittee for inclusion in the record subsequent to the hearing:]

LETTER FROM MARY L. SCHAPIRO

APRIL 3, 1995.

Hon. THAD COCHRAN,
*Chairman, Subcommittee on Agriculture, Rural Development, and Related Agencies,
Committee on Appropriations, U.S. Senate, Washington, DC.*

DEAR MR. CHAIRMAN: During the Subcommittee on Agriculture's hearing on March 1, 1995, you asked me about the Commodity Futures Trading Commission's plan to reorganize its enforcement program. On March 8, the Commission announced a restructuring of its regional office system to strengthen its enforcement program and enhance surveillance and other activities. I am enclosing a copy of the Commission's press release and respectfully request that you include it at an appropriate place in the Subcommittee's hearing record.

Thank you for your consideration.

Sincerely,

MARY L. SCHAPIRO,
Chairman.

Enclosure.

CFTC RESTRUCTURES ITS REGIONAL OFFICE SYSTEM

The Commodity Futures Trading Commission announced today that the agency is restructuring its regional office system. The New York and Chicago offices will each be headed by a Regional Director, a senior staff member who will report directly to the Chairman. "It is essential," Chairman Mary L. Schapiro stated, "for the CFTC to have a strong and vibrant presence in the nation's major market centers. This can only be accomplished by raising the profile and stature of the New York and Chicago offices by having a strong leader, with direct input to the Chairman and the Commission, heading these critical offices." The heads of the two offices will coordinate all of the office's substantive functions, ranging from enforcement to surveillance and exchange oversight. The Los Angeles enforcement office, and the Kansas City and Minneapolis market surveillance offices will report to the Chicago Regional Director.

This upgrading will enhance the agency's functions outside its Washington, D.C. headquarters. Particularly in the enforcement arena, the enhanced regional presence will reinforce the CFTC's nationwide program. Chairman Schapiro stated that "the restructuring will benefit the agency by ensuring consistent implementation of the Commission's programs on a nationwide basis."

Chairman Schapiro has asked Enforcement Director Dennis Klejna to assume the post of New York Regional Director. She stated that she could "think of no better person to enhance the agency's profile in the New York office. I hope that Dennis will be willing to give the CFTC the continued benefit of his dedication, expertise and leadership." The agency will commence a nationwide search for an experienced, qualified senior professional to assume the post of Regional Director in Chicago.

FARM CREDIT ADMINISTRATION

STATEMENT OF MARSHA MARTIN, CHAIRMAN AND CHIEF EXECUTIVE OFFICER

ACCOMPANIED BY:

**GARY BYRNE, CHAIRMAN OF THE BOARD OF THE FARM CREDIT
SYSTEM INSURANCE CORPORATION
DOYLE COOK, BOARD MEMBER**

INTRODUCTION OF WITNESS

Senator COCHRAN. We will now hear from the Farm Credit Administration witnesses. We ask you to come forward.

Marsha Martin is Chairman and Chief Executive Officer of the Farm Credit Administration. Board members Gary Byrne, who is also Chairman of the Board of the Farm Credit System Insurance Corporation, and Doyle Cook are here. We appreciate your attendance at the hearing.

As members of the subcommittee know, the Farm Credit Administration has a limitation on administrative expenses. For fiscal year 1996, \$39.9 million is requested, a decrease of \$520,000 from the current funding level.

The role of the Farm Credit Administration is largely staff-intensive and most of its expenses are consumed by payroll responsibilities. Eighty-two percent of its budget is devoted to compensation for employees.

We appreciate very much, Ms. Martin, your being here. We have your entire statement, which we thank you for submitting to the subcommittee.

We will make it a part of the record in full, and we ask you to proceed with any comments or additional statements that you would care to make. We welcome you.

STATEMENT OF MARSHA MARTIN

Ms. MARTIN. Mr. Chairman, thank you very much. Yes; we do have our other board member here, and it is my pleasure to introduce you to Gary Byrne. Gary has been on the FCA board for 3 years now.

Also, on my right is Doyle Cook. Doyle has been on the board now for about 4½ months.

My name is Marsha Martin, and, as you indicated, I am Chairman of the Board and Chief Executive Officer. I have been here 4 months, also. We are pleased to be here.

I want to, if I may, make a brief statement. I know you have the longer statement which I submitted for the record. Following my testimony, we will, of course, take any questions that you might have.

On February 7, we provided you with copies of the agency's budget justification and supplement, which detailed information on the

specifics of our budget proposal. So today, I will just give a brief overview and highlight what was presented to you in the budget justification.

ROLE OF FCA

FCA is charged with regulating and examining the banks, associations and related entities that comprise the Farm Credit System. Ours is an independent oversight role that does not require involvement in the day-to-day management of System institutions.

It is our task to ensure that Farm Credit System institutions comply with the law and exercise safe and sound banking practices. In short, we ensure the safeness and soundness of the Farm Credit System.

ROLE OF THE FARM CREDIT SYSTEM

The objective of the Farm Credit System is to provide agriculture with a source of reliable, competitively priced credit. While the System is relatively small, \$55 billion in loans, all farmers benefit by its presence because of the competition for credit it brings to rural America.

The Farm Credit System represents privatization of a public policy objective. There is no Government cost, even for FCA, its regulator, to the American taxpayer. Our costs are paid by the institutions we regulate.

We at FCA are proud of our record. Safeness and soundness are achieved at a cost of \$40 million, or a seven-basis-point charge to borrowers.

Without independent verification of System performance, I am confident the cost to borrowers would be much higher than the seven-basis-point charge that it costs to sustain FCA.

In fact, this point was substantiated by a recent GAO report on the Farm Credit Administration. This report also gave very high marks to our examination process for System institutions.

FINANCIAL CONDITION OF THE FARM CREDIT SYSTEM

Mr. Chairman, as you are aware, almost a decade ago, the Farm Credit System suffered significant losses and its financial viability was in question.

The assistance provided by the Congress allowed the System to get back on its feet and, under the watchful eye of the Farm Credit Administration, rebuild an even stronger Farm Credit System.

Since 1991, the System has provided for the repayment of all the debt issued by the Farm Credit System Financial Assistance Corporation during the crisis of the 1980's.

Currently, I am pleased to report that the Farm Credit System is healthy. Earnings for the first 9 months of 1994 totaled \$765 million and are projected to be approximately \$1 billion for the year, providing continued growth in System capital.

Between September 1993 and September 1994, combined total capital rose from \$7.3 to \$7.8 billion. The System sharply reduced nonperforming loans by 29 percent during this same period.

FCA STRATEGIC PLANNING

A challenge for my fellow board members and me is to make certain that FCA continues to work aggressively to achieve cost savings yet maintain the quality performance necessary to ensure safeness and soundness in the Farm Credit System.

Last year, in formulating our strategic plan, specifying the agency's vision to the year 2000, we established three objectives.

No. 1, minimize risk to the customer/shareholders, investors, and the insurance fund; No. 2, reduce the burden of FCA's regulations and policies; and No. 3, continue to build a more efficient, cost-effective FCA.

We are dedicated to an ultimate goal of a more streamlined, yet an effective, FCA. The message in our strategic plan is a simple one: Maintain our record of regulatory excellence, improve our overall effectiveness, and hold the line on cost.

FCA STREAMLINING EFFORTS

The challenges of this message, however, are not simple. Restructuring agency operations and redeploying resources in a downsizing environment are difficult tasks. We are committed, however, to achieving them.

In the past 5 years, FCA has reduced its work force by almost one-third. This effort continues as changes in the institutions we regulate call for continuous self-evaluation.

Mr. Chairman, having provided this overview on how far we have come, I would like to share briefly with you where we plan to go.

This Congress, the administration and the American public have made it abundantly clear that Government has to adopt a new mindset in the way it conducts its business.

There is a clarion call for a more efficient and streamlined Government. At FCA, we are ready to meet this challenge and have taken steps toward implementation, as I indicated previously.

BUDGET PROPOSAL FOR FISCAL YEAR 1996

For fiscal year 1996, we propose a budget of \$39.9 million, \$520,000, or 1.3 percent, less than the level approved for fiscal year 1995. This budget reflects a decrease in employees from 404 to 390 and comparable reductions in general, administrative and operational expenses.

An FCA task force is currently developing a long-range staffing plan for operating in a downsizing environment. This plan will identify essential jobs for FCA to continue to ensure the safeness and soundness of the Farm Credit System. In a streamlined environment, the latter will be our greatest challenge.

RISK ASSESSMENT PROJECT

One area we hope not to sacrifice is our risk assessment project. This project identifies risks that could significantly affect the Farm Credit System, altering its future either positively or negatively.

For example, through this effort last year, FCA studied derivatives, interest rate risk, and policy changes in farm programs. Similar and equally important studies are in progress this year.

Another positive effort we plan to continue is one to identify regulations that are ineffective or impose a burden greater than the benefit derived. This examination is similar to that proposed in regulatory reform legislation now pending.

In December, I am pleased to report, the FCA board repealed eight regulations that were no longer needed. Many others are now being considered for modification.

Another very positive effort now underway at FCA involves our Examination Division. Resources are being allocated based on the level of risk present in each institution. As this program matures and technology improves, FCA will be conducting more and more offsite examinations.

In addition, examinations of Federal Land Bank Associations will be conducted concurrently with the examination of their supervising Farm Credit Bank. These two efforts will reduce FCA staff time significantly and allow FCA to deploy its examination work force in the most efficient, cost-effective way possible.

Because our examination function represents almost one-half of our budget, these streamlining efforts are significant.

Mr. Chairman, we have heard the challenge. We have set into motion a framework for meeting new standards and expectations while assuring you we will maintain the safeness and soundness of the Farm Credit System.

Thank you for this opportunity. My fellow board members and I look forward to answering any questions you might have.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Ms. Martin, for your comments. Thank you for being here, and we appreciate your fellow board members' attendance as well. Your complete statement will be inserted in the record.

[The statement follows:]

PREPARED STATEMENT OF MARSHA MARTIN

Mr. Chairman and members of the subcommittee, I am Marsha Martin, chairman and chief executive officer of the Farm Credit Administration. With me this afternoon are my colleagues, FCA Board members Gary Byrne and Doyle Cook. We will present the Agency's budget request for fiscal year 1996.

On February 7, we provided you with copies of the Agency's budget justification and supplement which detailed information on the specifics of our budget proposal. Today, I will provide an overview of FCA operations and highlight activities supported by this request.

FCA is charged with regulating and examining the banks, associations and related entities that comprise the Farm Credit System. Ours is an independent oversight role that does not require involvement in the day-to-day management of System institutions. It is our task to ensure that Farm Credit System institutions comply with the law and exercise safe and sound banking practices. In short, we ensure the safeness and soundness of the Farm Credit System.

The objective of the Farm Credit System is to provide agriculture with a source of reliable, competitively priced credit. While the System is relatively small—\$55 billion in loans—all farmers benefit by its presence because of the competition for credit it brings to Rural America.

The Farm Credit System represents privatization of a public policy objective. Each Farm Credit System institution is privately owned and operated. There is no Government cost—even for FCA, its regulator—to the American taxpayer.

We at FCA are proud of our record. Safeness and soundness are achieved at a cost of \$40 million, or a 7-basis-point charge to borrowers. Without independent verification of System performance, I am confident the cost to borrowers would be much higher than the 7-basis-point charge that it costs to sustain FCA. In fact, this point

was substantiated by a recent General Accounting Office report on the Farm Credit Administration.

The objectives prescribed by our mission require that we be prepared to respond swiftly to any changes in this environment that could potentially affect System stability.

Mr. Chairman, as you are aware, almost a decade ago the Farm Credit System suffered significant losses and its financial viability was in great peril. The assistance provided by the Congress allowed the System to get back on its feet and, under the watchful eye of the Farm Credit Administration, rebuild an even stronger Farm Credit System. Since 1991, the System has provided for the repayment of all the debt issued by the Farm Credit System Financial Assistance Corporation during the crisis of the 1980s.

Farm income remains strong, enhancing the repayment capacity of many borrowers. Earnings for the first 9 months of 1994 totalled \$765 million and are projected to be approximately \$1 billion for the year, prompting continued growth in System capital. Between September 1993 and September 1994 combined total capital rose from \$7.31 billion to \$7.81 billion. The System also sharply reduced nonperforming loans by 29 percent during this period.

The System continued to maintain lower spreads on debt issues compared with Treasury securities. From the historically high spreads during the late 1980s—80-plus basis points above Treasuries in 1988—the System's average spreads during 1994 ranged between 9 and 22 basis points over Treasuries, an indication of investor confidence in Farm Credit. Each basis point reduction in spread saves approximately \$5 million in interest expense for the System and its farmer-borrowers.

An improvement in CAMEL ratings—the Agency's evaluation of an institution's capital, assets, management, earnings, and liquidity—reflects continued improvement in the financial health of the System. Institutions are rated on a declining scale of 1 to 5. At the end of 1990, 94 institutions carried the higher ratings of 1 or 2 and 40 institutions were rated 4 or 5. At the end of 1994, 197 institutions were rated 1 or 2, only one institution had a 4 rating, and no institutions had a rating of 5. Enforcement actions—the mechanism for bringing about corrective action when an institution is found to be in violation of statute, regulations, or is operating in an unsafe or unsound manner—have been reduced. At December 31, 1994, only 24 institutions of 232 were under enforcement action, down from 72 institutions at December 31, 1990—a decrease of two-thirds.

Mr. Chairman, FCA's role in this revitalization of the System was described in a General Accounting Office report issued last year. After assessing FCA's effectiveness as a regulator, GAO concluded that "FCA has taken timely, strong enforcement actions when it documented serious problems" in the institutions regulated and that our field offices assure "quality and reliability in their examinations." We could not have asked for a stronger testimonial to our efforts to perform a job well.

FCA has worked aggressively to achieve cost savings yet maintain the quality necessary to ensure safeness and soundness in the Farm Credit System. Last year, in formulating our strategic plan specifying the Agency's vision to the year 2000, we established three objectives:

1. Minimize risk to the System's customer/shareholders, investors, and the Insurance Fund.
2. Reduce the burden of FCA's regulations and policies.
3. Create an FCA that works better and costs less.

We are dedicated to an ultimate goal of a more streamlined, yet effective, FCA. The message in the strategic plan is a simple one: maintain our record of excellence in our regulatory mission, while simultaneously improving our overall effectiveness and holding the line on cost. The challenges embodied in this message, however, are not simple. Restructuring Agency operations and redeploying resources in a downsizing environment are always difficult tasks. We are committed, however, to achieving them. We have demonstrated this commitment by the 17 percent decrease in full-time equivalents in the last 3 years.

During 1992 and 1993, outside consultants hired by FCA reported that the Financial Management System suffered certain shortcomings in its ability to support the Agency's management reporting needs. We have made meaningful progress in improving the accounting, budgeting, and payroll processes to ensure compliance with Office of Management and Budget, General Accounting Office, and Department of the Treasury requirements. Even though FCA is not required to obtain audited financial statements, it elected to do so. While it has not yet issued a final report, the independent auditor has informed FCA that the report will reflect an unqualified opinion. I am pleased to report that as a result of our progress in this area, the Office of Management and Budget has removed the Agency from its high-risk rating list.

Having provided this overview of how far we have come, I would like to share with the subcommittee where we plan to go.

This Congress, the Administration, and the American public have made it abundantly clear that Government has to adopt a new mindset in the way it conducts its business. There is a clarion call for a more efficient and streamlined government. At FCA, we are ready to meet this challenge and have taken steps toward implementation.

For fiscal year 1996, we propose a budget of \$39.9 million. This is \$520,000, or 1.3 percent, less than the level approved for fiscal year 1995. We believe that this budget reflects our commitment to a more streamlined, efficient operation.

In alignment with staffing goals, our budget request reduces FTE's from 403.7 in fiscal year 1995 to 389.6 in fiscal year 1996. This is well below OMB's target of 408 FTE's by fiscal year 1999.

Our budget reflects comparable reductions in general administrative and operational expenses. For example, our projection for transportation expenses is 2 percent below the fiscal year 1995 level. Since 81 percent of the travel budget is for the examination function, much of this reduction can be attributed to closing two examination field offices and relocating staff this year. The proposed budget for consulting and other services is reduced by 7 percent. Equipment purchases will be reduced by 28 percent.

FCA's key activities for fiscal year 1996 reiterate a commitment to consolidation, preparedness, and creativity in finding ways to do more with less. I would like to highlight a few such initiatives that support this budget request.

RISK ASSESSMENT

Last year, the Agency launched its Risk Assessment Project. This project addresses systemic risks that could impact the Farm Credit System. The Agency identified key risks, for example, derivatives, interest-rate risk, and policy changes in farm programs. Priorities were assigned to each risk. The Agency currently is conducting studies of the higher priority risks to assess whether improvements are needed in the way we address the risk.

REGULATORY BURDEN

Two years ago, the FCA Board began a process to determine the extent to which regulations issued by the Agency duplicate other governmental requirements, are ineffective, or impose a burden greater than the benefit derived. This examination is similar to that proposed in regulatory reform legislation which is currently on a fast track in the House of Representatives. Numerous relief projects have been prompted by this initiative: two are already out in the form of proposed regulations. We will continue to aggressively pursue this project next year.

FCA STAFFING PLAN

As noted, FCA has already reduced its staff by 17 percent. As part of its multifaceted streamlining program, FCA has formed a task force to develop a long-range staffing plan. Members of this group are developing a contingency plan for operating in a downsizing environment. Work force needs through fiscal year 1999 will be projected. This plan will specify key FCA functions, identify the workload for each function, establish staffing patterns based on realistic productivity expectations, and evaluate organizational alignments.

RISK-BASED EXAMINATIONS

Examination resources are now being allocated based on the level of risk present in each institution. As part of this risk-based examination approach, offsite examinations are conducted on low-risk institutions as evidenced by their CAMEL ratings. Additionally, examinations of Federal Land Bank Associations will be conducted concurrently with the examination of their supervising Farm Credit Bank, thereby reducing the number of resources needed for FLBA examinations. This risk-based approach reduces staff time and allows FCA to deploy its examination work force in the most efficient way possible.

Mr. Chairman, we have heard the challenge and have set into motion a framework for meeting new standards and expectations, while assuring you we will maintain the safety and soundness of the Farm Credit System. Thank you for this opportunity to appear before you today. We welcome any questions you might have.

FARM CREDIT SYSTEM LOAN VOLUME

Senator COCHRAN. Let me ask you this question: When I was in Mississippi recently, I asked some of my friends, who are involved in some of the institutions under the Farm Credit Administration system, how they were doing, what the level of debt was, were farmers paying off their loans.

As a matter of fact, one person suggested that they were not doing as well as an institution because farmers were paying off their loans, and they were not borrowing as much money as in the past.

Is this something that is true throughout the country, or is this just an illustration of how things are going in the Deep South?

Ms. MARTIN. Well, from the standpoint of Mississippi, I certainly would respect the information you got from the local association people. From the standpoint of the country as a whole, we do see a slight increase in farm debt.

And from the standpoint of the agency, we have been interested in the slight growth that the System is experiencing. This is the first growth that we have seen in some time.

So the report you received probably reflects a more localized situation. Farmers across the country, from our perspective, are borrowing more money. And perhaps they feel more comfortable in a healthy environment.

NET INCOME OF FCS BORROWERS

Senator COCHRAN. Well, the yields have been good in most parts of the country in some of the major crops, and last year was a good year for agriculture, although net income has been decreasing.

Is that something that has turned up in your reports and analysis of the situation out in farm country?

Ms. MARTIN. Our examiners are watching very closely what is being projected in terms of net income for next year. They do recognize that input costs are going up. They do say that gross income is going up.

But with increases in the input costs, net income is coming down. So from the standpoint of safeness and soundness, we are looking very closely at that issue.

I would ask if any of my fellow board members have any other comments?

[No response.]

FCS INSTITUTION INTEREST RATES

Senator COCHRAN. On the increase in interest rates, the Fed has ratcheted up interest rates for certainly short-term moneys, and all borrowing has been affected.

Has that affected the Farm Credit Administration interest charges as well?

Ms. MARTIN. We do know that when interest rates go up, Farm Credit interest rates go up, also. We will be looking, again very closely, at the implications. They have not shown up yet, as you would expect.

But certainly, going into a new year, we do anticipate that the interest rates will have some effect on the entities we supervise and oversee.

EFFECTS OF FARM BILL PROPOSALS

Senator COCHRAN. There is talk that some of the farm programs will be changed in the rewriting of the farm bill this year.

If support for producers does come down, as some are suggesting it should—support from the Federal Government, income protection—is this going to have an effect on land values?

Is it going to have an effect on net cash income that farmers are going to realize in their production experiences?

Ms. MARTIN. Mr. Chairman, we have recently looked at this issue and are now putting the final touches on a study that looks at farm programs and the implications for the entities that we oversee.

From the standpoint of individual financial data, we are unable to see or reach through the associations' loan account data to the individuals and their financial well-being. We do have some information on individual loans, though, and our plan is to provide that analysis to you from our perspective as a regulatory agency for an agricultural credit institution.

From the standpoint of specific commodities—and you mentioned Mississippi a while ago—I might mention to you that our study does indicate that for those involved with cotton and rice, the implications are somewhat more serious, perhaps, than those for some other commodities.

So I think you will be interested in our study, and we look forward to sharing that with you.

FARM CREDIT SYSTEM INSURANCE CORPORATION

Senator COCHRAN. I look forward to having that information before we start our work on the farm bill. I notice in the President's budget there is a mandatory pay-as-you-go proposal for reduction of administrative expenses by reformulating the Farm Credit System Insurance Corporation's Board of Directors. I suppose Gary Byrne ought to answer this question.

Mr. BYRNE. I would be pleased to answer the question.

Ms. MARTIN. Absolutely. He is the Chairman of the Insurance Corporation.

Senator COCHRAN. Can you provide us with any information about that? Is the composition of the Board stated in current law? Will there have to be legislation to implement this assumption that is in the President's budget request?

Mr. BYRNE. Yes, Mr. Chairman, there would be. Currently, the statute provides that as of January 1, 1996, the composition of the Farm Credit System Insurance Corporation Board would change.

Currently, the Board of the Insurance Corporation is identical to that of the FCA. The new Board would be made up of three PAS-level individuals who would be totally independent of the FCA.

Based on our calculations, if this went into place, we estimate it would more than double the size of the Insurance Corporation.

The Insurance Corporation currently only has nine employees. If we had three PAS-level directors, plus a variety of other authorities

that would need to be incorporated, it would be a substantial change in the way the Corporation is currently governed.

But to change that would require an act of Congress.

Senator COCHRAN. Well, do you support the request as submitted by the President? Do you think it is important for us to do this?

Mr. BYRNE. Yes.

REGULATORY REFORM EFFORTS AT FCA

Senator COCHRAN. Let me ask Doyle Cook, I know the Chairman has talked about the regulatory reform effort that is going on at the administration, at the FCA, and I commend you for that.

Looking for regulations to modify or rescind, as you say you have done, to try to reduce unnecessary costs on your borrowing institutions, is this going to be a continuing effort by the Board, do you think, Mr. Cook? And does it have your support?

Mr. COOK. Yes; it certainly does. In fact, I am working with a work group at FCA to eliminate burdensome regulations as much as possible. But as Marsha mentioned, we already have eliminated several.

In stages two and three of our regulatory burden project, we will be looking at several more regulations. We will do everything we can to streamline the regulations.

Senator COCHRAN. Well, that is good to hear, and I appreciate your full report on what is going on at the Farm Credit Administration. I think you are doing a good job.

We welcome you in your first appearance before this committee, and commend you for the good start you are off to.

Ms. MARTIN. Thank you.

Senator COCHRAN. We will be reviewing the budget request very carefully, and we thank you for your cooperation.

Mr. BYRNE. Thank you, Mr. Chairman.

Ms. MARTIN. Thank you.

SUBMITTED QUESTIONS

Senator COCHRAN. We will submit additional questions in writing to be answered for the record.

[The following questions were not asked at the hearing, but were submitted to the agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

Farmer Mac

Question. Last year, then-Chairman Brown testified that the Federal Agricultural Mortgage Corporation (Farmer Mac) had and was continuing to experience operating losses. Can you give us a brief evaluation of the current situation at Farmer Mac and what action will be forthcoming? Could changes in farm programs likely affect the worsening situation at Farmer Mac? Will recent increases in interest rates make the secondary market for agricultural loans more attractive?

Answer. Farmer Mac losses have continued during 1994. For calendar year 1994, Farmer Mac reported losses of \$1,332,000. Farmer Mac's business volume outstanding declined for the second straight year. At yearend 1994, Farmer Mac had a total of \$459 million in guarantees outstanding, compared to \$488 million at yearend 1993, and \$574 million at yearend 1992. We expect Farmer Mac losses to continue until the volume of business is approximately \$1.5 billion -- a volume large enough to cover annual expenses.

The challenges facing Farmer Mac appear to be unrelated to farm programs. In particular, Farmer Mac seems to be developing slowly in part because the supply of agricultural credit has been ample to meet the demand without using the secondary market. Furthermore, statutory provisions -- such as the requirement for a 10 percent subordinated interest/reserve and the inability of Farmer Mac to pool loans -- have hindered the development of the secondary market. During 1995 Farmer Mac will seek legislation aimed at removing the statutory impediments to the market.

It is difficult to say whether the recent rise in interest rates will make the secondary market more attractive. We would expect these changes to have only a marginal effect on Farmer Mac's business activity. The higher rates make refinancing existing fixed-rate loans less attractive. However, because short-term rates rose more than long-term rates, existing variable-rate loans tied to short-term indices have become costlier to borrowers. Refinancing these loans might prove attractive. We would have expected that the low long-term fixed rates available during 1993 and early 1994 would have been favorable conditions for Farmer Mac. However, Farmer Mac did not experience any surge in business.

Farm Program Changes

Question. As you are aware, the Congress is beginning its deliberations for the 1995 Farm Bill. Some have proposed modest to drastic reduction in farm programs. What steps has the FCA taken to address the potential decrease in farm programs and its impact on loan values?

Answer. The FCA has established a Farm Policy Task Force for the purpose of monitoring Farm Bill developments and conducting analyses of emerging options. The Task Force has recently completed a study of four alternative farm policy scenarios to assess the impact of both moderate and severe cuts on the farm economy. In addition, it has analyzed the exposure of Farm Credit institutions to concentrations of or price fluctuations in farm program commodities. FCA staff expects to conduct additional analyses as the Farm Bill debate unfolds. As you requested, the Agency will be providing you a copy of the study when it is completed.

Question. Do you have any thoughts as to what impact a decrease in farm program assistance would have on the farmer's ability to get credit?

Answer. The ability of farmers to obtain credit from the Farm Credit System depends in large measure on the repayment capacity of each farmer. If farm programs are cut, some marginal producers who are heavily dependent on farm programs may fail to qualify for credit. The extent to which this occurs depends on the nature and extent of the farm program cuts, the production adjustments farmers are able to make, and commodity prices. Some farmers adversely affected should be able to obtain credit through the Farmers Home Administration's credit programs. However, the most marginal producers may fail to qualify for credit anywhere and may be forced to stop farming as a result.

Question. For the record, can you approximate how many loans will be jeopardized at hypothetical program decreases of 30, 50, 75, and 100 percent?

Answer. FCA's farm policy study considered only 20 percent and 50 percent decreases in farm programs. Therefore, the study can only partially address your question. The number of loans that might be in jeopardy under various levels of farm program cuts will depend on the nature and extent of the cuts as well as the financial condition of the borrower and the sources of repayment for the loan. This will also be affected by the production adjustments farmers are able to make and commodity prices. Much of the borrower specific information needed to answer this question is only available from the System lending institutions.

Question. With respect to other forms of risk that the Farm Credit System faces, what is the status of FCA's Risk Assessment Project? What resources are requested to complete this project?

Answer. In addition to the use of the Agency's personnel resources, the FCA has requested \$50,000 for consulting services for risk assessment projects in FY 1996. Phase I of the Risk Assessment Project was completed in March 1994 with the listing, description, and prioritization of the principal risks facing the Farm Credit System.

Phase II is ongoing and consists of a series of projects that investigate the higher priority risks. Recommendations are made to FCA management on appropriate regulatory response to the risk. FCA has already conducted studies of two of the higher priority risks. These risks are FCS use of financial derivatives and the implications of changes in the 1995 Farm Bill as it relates to commodity concentrations in the System.

The derivatives study's goal was to review safety and soundness implications of the System's use of and the Agency's existing guidance and monitoring of derivatives activity, and to recommend any needed FCA actions to improve oversight. The study found that the System was prudently using derivatives and that the amounts outstanding did not present unreasonable risk. It also determined that FCA has the means to monitor and regulate the use of derivatives by System institutions effectively. Recommendations were made in several areas where the Agency could enhance its surveillance of derivatives. These included updated guidance to the System, modifications in Call Reporting requirements to better accommodate derivative activity, continued training of staff in derivatives use, and continued close surveillance of derivatives activities both in the markets and by System institutions.

The farm policy analysis suggests that dairy, rice, and cotton producers are most vulnerable to cuts in government programs. Modest cuts in most other commodities likely

pose limited risks to FCS portfolios. Still, the majority of FCS institutions would be influenced by broad cuts in government programs. The FCA will continue to assess the impact of changes in farm policies on the financial condition of the Farm Credit System.

During FY 1995 and 1996, as an additional part of Phase II, the Agency will conduct in-depth studies in several other high priority risk areas. These new projects will be selected from the list of identified risks provided in our response to the previous question. Phase III of the Risk Assessment Project lays out a process for identifying and analyzing emerging systemic risks, and incorporating the findings into the examination and enforcement functions. This process will assure that the Agency is regularly updating its understanding of the risks affecting the Farm Credit System.

System Risks

Question. I note in the budget justification that FCA is taking steps to address what you call "systemic risks" or risks such as those associated with changes in farm program policy, derivatives, and interest rates. Earlier this week, there was much attention in the press to the bankruptcy of Barings Bank in London due to losses in the derivatives market.

- a. Could this happen to a Farm Credit System Bank?
- b. Where does derivative risk fall in your prioritization of these risks?
- c. Do you anticipate giving higher priority to this issue?
- d. What steps do you envision taking to prevent losses from risky derivatives market investments?

Answer. a). System institutions are not authorized to engage in trading financial contracts for speculative purposes, the activity which reportedly caused the major losses for Barings PLC. System institutions are permitted to have financial derivative contracts for purposes of limiting their exposures to interest rate risk. They may also hold derivative securities on their balance sheets, subject to risk limitations specified by FCA investment regulations.

b). The FCA has identified derivatives risk as one of its two highest risk priorities.

c). An FCA Workgroup investigated System institutions' use of derivatives, the current FCA regulatory practices, and the many initiatives undertaken by other regulators. The study concluded that the System was prudently using derivatives and the amounts outstanding did not present unreasonable risk. It also determined that FCA has the means to regulate the use of derivatives by System institutions effectively.

d). The Workgroup made recommendations in several areas where the Agency could improve its surveillance of derivatives. These included updated guidance to the System, modification in Call Reporting requirements to better accommodate derivatives activity, continued training of staff in derivatives use, and continued close surveillance of derivatives activities both in the markets and by System institutions.

Mexican Peso

Question. What impact, if any, do you estimate the recent devaluation of the Mexican Peso will have on the Farm Credit System?

Answer. The peso devaluation will affect the Farm Credit System in two ways, but it is premature to quantify either impact. First, the System has loans and lines of

credit to Mexican banks, the majority of which are under U.S. Government guarantees and thus not at risk. Secondly, because of the possibility of higher Mexican imports and lower U.S. farm exports to Mexico, there may be indirect effects through lower domestic prices and thus a reduced repayment capacity of some domestic producers.

One System institution had total net loans and letters of credit in Mexico of \$1.5 billion as of February 15, 1995. This institution's direct lender risk in Mexico (non-guaranteed) is about \$63.8 million in cross-border exposure. Of this, the institution's management considers only \$9.5 million as loans to the higher risk Mexican banks (i.e., smaller, poorly-capitalized banks with large portfolios of under performing loans). With interest rates at 50 to 80 percent, Mexican borrowers will likely have increased repayment problems and credit to producers may be difficult to provide. Also, the number of Mexican banks at risk will continue to grow. At this point, the Agency believes the System institution's capital is sufficient and that its allowance for loan losses is adequate to cover the risk identified in its higher risk loans to Mexican banks.

In terms of the indirect effects, the most likely impacts are expected in the Southeast and Southwest and are associated with citrus and an array of fresh fruits and vegetables -- items expected to suffer the most significant price effects. In particular, a number of Farm Credit associations in Florida and California have portfolios with significant concentrations of loans to producers of these products. There are three Florida associations that have between one-third and two-thirds of their portfolio in citrus. Likewise, several California associations have high concentrations in a diverse combination of fruits, vegetables and tree nuts. The Agency will be monitoring farm product prices and watching for any signs of adverse trends in credit quality.

Question. Is this an area that may require attention in the future from those assessing the risks that System banks face?

Answer. Problems associated with the peso crisis are most likely to show up in the aforementioned System institution. In addition, loan performance problems could arise among some associations in Florida and California due to high loan concentrations in commodities affected most by changes in the resulting terms of trade between the U.S. and Mexico. FCA examiners are already monitoring the situation carefully and will continue to do so into the foreseeable future. FCA's economists are also monitoring the situation and will provide agency management with information that will help it to be proactive in both its examination and enforcement functions.

Computer Equipment

Question. I notice in the budget justification that there is a substantial decrease in equipment purchases. In fiscal year 1995, the request was \$738,000. For 1996, the request is \$535,000, a decrease of \$203,000.

- Will this request provide the FCA with adequate resources to continue to replace outdated equipment?
- Would you please provide for the record a summary of the Farm Credit Administration's 5-year Information Resources Management plan, and the resources which will be required to implement this plan.

Answer. The 1996 budget request of \$535,000 will provide FCA with adequate resources to continue with replacement of outdated equipment. An executive steering committee chaired by the Chief Operating Officer provides direction and oversight of the Information Resources Management (IRM) program to ensure that resources are

appropriately focused on the most critical needs of the Agency. In striving to achieve IRM goals, the FCA has taken a systematic approach to updating its investment in technology. During FY 1994, FCA replaced almost 225 obsolete desktop and laptop computers. In FY 1995, FCA is beginning to migrate its architecture to a client/server environment. In FY 1996, FCA expects to complete the transition to this new architecture by moving the database applications off the VAX cluster. Also during FY 1996, FCA will replace remaining desktop computers that will be obsolete by then. FCA is placing major emphasis on the management of information resources to assist in accomplishing its mission. Information resources include FCA business information, information technology, and the people who perform and support information activities. In summary, the IRM goals that have been formulated to support Agency goals and strategies in the FCA Strategic Plan include:

- Maximize the utilization of existing information resources.
- Provide efficient and effective maintenance of existing information systems and resources.
- Maintain and improve the efficiency and effectiveness of Agency information collection, retrieval, and dissemination.
- Provide a cost-effective, flexible, and easy-to-use technology infrastructure that can provide quality support to FCA offices.

The 5-year IRM plan does not have costs associated with it per se. Rather, it sets the framework for supporting existing initiatives and developing new ones. The IRM goals guide the Agency IRM program when initiatives are proposed by FCA operating units. Recommended proposals are forwarded to the executive steering committee for budget and project approval. Major initiatives undergo a cost benefit analysis prior to being recommended for approval. For example, the existing VAX mainframe is aging and maintenance costs for this large-scale installation are significant. The Agency has developed a migration strategy to a client-server environment. The costs associated with this are included in the FY 1995 and 1996 budgets. The Agency must maintain the VAX while building the new architecture. Included in the cost of transition are added maintenance and training along with new equipment and software.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

STATEMENT OF DAVID A. KESSLER, M.D., COMMISSIONER

ACCOMPANIED BY:

WILLIAM SCHULTZ, DEPUTY COMMISSIONER, POLICY

MARY PENDERGAST, DEPUTY COMMISSIONER AND SENIOR ADVISOR

MARY JO VEVERKA, DEPUTY COMMISSIONER, MANAGEMENT AND SYSTEMS

LINDA SUYDAM, INTERIM DEPUTY COMMISSIONER, OPERATIONS

SHARON SMITH HOLSTON, DEPUTY COMMISSIONER, EXTERNAL AFFAIRS

RONALD G. CHESEMORE, ASSOCIATE COMMISSIONER, REGULATORY AFFAIRS

KATHRYN ZOON, DIRECTOR, CENTER FOR BIOLOGICS EVALUATION AND RESEARCH

D. BRUCE BURLINGTON, DIRECTOR, CENTER FOR MEDICAL DEVICES AND RADIOLOGICAL HEALTH

MURRAY LUMPKIN, DEPUTY DIRECTOR, REVIEW MANAGEMENT, CENTER FOR DRUG EVALUATION AND RESEARCH

JANICE OLIVER, DEPUTY DIRECTOR, SYSTEMS AND SUPPORT, CENTER FOR FOOD SAFETY AND APPLIED NUTRITION

BERNARD A. SCHWETZ, DIRECTOR, NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH

STEPHEN SUNDLOF, DIRECTOR, CENTER FOR VETERINARY MEDICINE

DIANE THOMPSON, ASSOCIATE COMMISSIONER, LEGISLATIVE AFFAIRS

ROBERT BYRD, ASSOCIATE COMMISSIONER, MANAGEMENT

A. ROBERT MILLER, ACTING DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT

WILLIAM R. BELDON, DIRECTOR, DIVISION OF PUBLIC HEALTH AND SOCIAL SERVICES BUDGET ANALYSIS

INTRODUCTION OF WITNESS

Senator COCHRAN. The next budget request we will consider is that of the Food and Drug Administration. Dr. David Kessler is here. He is Commissioner of the Food and Drug Administration.

By way of opening comments, the fiscal year 1996 request for the FDA for salaries and expenses is almost \$830 million. This is a \$9,028,000 increase from the fiscal year 1995 level.

There are other assumptions in the President's budget request. The budget assumes increased collections from prescription drug user fees and other collections which would continue the implementation of the Mammography Quality Standards Act. These and other subjects will be reviewed by the committee very carefully.

Dr. Kessler, we appreciate your coming. I see you have a number of members of your staff with you today. Please introduce them and

we would appreciate your making any comments that you would like to make.

We have your statement, which we thank you for. We will make it part of the record in full. You may proceed.

STATEMENT OF DAVID A. KESSLER

Dr. KESSLER. Thank you very much, Mr. Chairman.

Let me introduce my colleagues: Mr. William Schultz, who is Deputy Commissioner for Policy; next to Mr. Schultz, Ms. Mary Pendergast, Deputy Commissioner and Senior Advisor, Ms. Mary Jo Veverka, who is Deputy Commissioner for Management and Systems.

Sitting next to me is Linda Suydam, who is Interim Deputy Commissioner for Operations, and Ms. Sharon Smith Holston, who is Deputy Commissioner for External Affairs.

It is indeed a pleasure to appear before you and present the 1996 budget for the Food and Drug Administration.

If I could, Mr. Chairman, I would like to take just a few minutes to discuss what FDA is mandated by the Congress and expected by the American people to do and how we are attempting to accomplish that mission.

The American people have come to expect and rely on the safety and wholesomeness of our food supply and the high standards of safety and effectiveness of our drugs and our devices. We are very committed to maintaining those standards and meeting those expectations. That is our core function.

FDA's activities cover over 1 trillion dollars' worth of products, many of which are vital to the health of the American people.

Our diverse responsibilities include licensing blood banks, monitoring clinical investigations, reviewing and approving prescription drugs, generic drugs, animal drugs, vaccines, biologics, medical devices, and food additives.

Our mission, as the Nation's oldest consumer protection agency, is to provide basic public health protection for the foods we eat, for the drugs we take, and the medical devices we use.

The assurance that FDA is there every day, doing its job, is so fundamental that we tend to take it for granted. Americans need not spend time worrying about breakfast cereals, pain relievers, contact lenses, vaccines, cough medicines, and thousands of other products that we use in our daily lives.

When we inspect manufacturing establishments to make sure that they use the materials and processes necessary to produce safe and effective products, when we monitor imported goods, more than 35 billion dollars' worth of imported goods each year, to make sure that they meet the same high standards as our domestic products, we succeed at what is FDA's real job: sustaining the American people's right to confidence in their public health protection and the peace of mind that goes with it.

We have been protecting consumers against an ever-increasing number of public health risks for almost nine decades, and we have not done it standing still.

As advances are made in science and technology, Mr. Chairman, FDA is constantly being presented with new questions for which

we are committed to seeking and finding the most efficient and effective answers.

I would like in this testimony to sketch out some of the accomplishments that we have achieved in the last year. Let me start with our obligation to make sure that drugs are carefully and quickly reviewed for their safety and effectiveness.

In 1992, the Prescription Drug User Fee Act, enacted by this Congress, gave FDA additional resources so that we could speed up our drug and biologic reviews without sacrificing their quality.

I can report, Mr. Chairman, that we have met all of the goals set out in the Prescription Drug User Fee Act to date, and we are substantially ahead of schedule for some of those goals.

If I can just draw your attention, Mr. Chairman, to the first chart.

The first chart shows that we are solving the problem of long drug delays. In the past, our typical median approval time for prescription drugs was 26.7 months.

The median approval time for user fee submissions in 1994 was 13.5 months. As you can see, we are approving important drugs in months, not years.

In connection with the user fee program, we committed to eliminate the backlog of overdue drug applications by July 2, 1995.

The second chart shows that we are meeting that commitment. The overdue backlog is down from 696 at the start of the program to just 4 by mid-February of this year. We certainly will meet our goal by July 1995, as set out by the Congress.

We have met every single performance standard to date for speeding approval of new drugs without compromising our long-standing standards of safety and effectiveness.

The third chart shows that we are also working hard to reduce the review times for medical devices, again without compromising safety and effectiveness.

In January 1994, our median review for 510(k) medical devices was 160.5 days. By January 1995, we cut the median review time to 98.5 days.

However, the slowest 5 percent of 510(k) reviews still take more than 500 days, and we are working hard to bring those times down as well.

The fourth chart shows the backlog of 510(k) medical device submissions. It shows that the backlog has been reduced from 1,824 in January 1994 to 371 at the start of this year.

There is still much to be done to improve review times on more complex devices, and we are committed to reducing backlogs and attaining faster review times.

These goals can be accomplished sooner if the Medical Device User Fee Program is enacted this year. We are hopeful that the user fee proposal negotiated last year by FDA, by Congress, and the medical device industry will provide an acceptable framework for discussion, debate, and action this year.

Mr. Chairman, we are particularly proud to have accomplished these results without lowering FDA's traditional high standards of safety and effectiveness.

FDA's requirements are regarded worldwide as the gold standard. Upholding FDA's standards is critical, not just to individual patients, but to the country as a whole.

Thanks to these standards, American patients and the national health care bill have been spared unnecessary expenditures on products that simply do not work. FDA-approved drugs work. Doctors and patients, both here and throughout the world, know that.

Mr. Chairman, my written testimony discusses in detail several other important programs of the agency, such as implementation of the new food label under the Nutrition Labeling and Education Act, of the Mammography Quality Standards Act, of progress in automating import surveillance, and our contribution to international harmonization standards throughout the world.

To save time for your questions, I would simply like to draw your attention to a sometimes-overlooked FDA mission that is of major significance to the protection of the public health.

That mission is to act swiftly and vigorously to safeguard Americans against products that have been contaminated or tampered with.

Only a few weeks ago, we received a call about a baby who had gotten sick and had to be taken to the hospital after being fed what looked like Similac, a widely sold infant formula.

This is the product. This is the can. The mother fed this formula to the child. It looks like, for all intents and purposes, a Similac infant formula can. As a pediatrician, when I looked at this can, I could not tell the difference between this can and the real Similac formula.

We were advised by Ross Laboratories, who are to be commended for the actions that they took in working with us, the manufacturer of Similac, that it had received several other complaints from other parents about ill effects on their infants.

We analyzed the can and the suspected formula and found that it was indeed counterfeit. We immediately removed tens of thousands of cans from the shelves of supermarkets that inadvertently sold the counterfeit formula.

The packaging is absolutely indistinguishable to the naked eye. I can show you on the next chart some of the very minor differences that the Secret Service, through their forensic laboratory, were able to detect.

The next chart shows the steps taken by our investigators to piece together the entire counterfeit scheme. Understand, Mr. Chairman, we were notified of this on February 1 of this year.

Our investigators traced the lids from Ohio to Rhode Island to California. We traced the counterfeit formula itself from Chicago to Wisconsin to Los Angeles. We worked with a Minnesota company to trace the source of the scoops within the formula. We traced the counterfeit labels to a suburb of Washington, DC.

And we followed all the leads to a warehouse in an industrial park in Los Angeles, where the counterfeit formula was being packaged.

Ten days after the first complaint, we seized tens of thousands of pounds of the counterfeit formula and the canning equipment and arrested one of the key figures behind the scheme. It was all done in 10 days.

Mr. Chairman, we believe that the requested budget will enable us to continue our mission, which next year will be nine decades old, still more efficiently and to the greater benefit of the American public.

Thank you, Mr. Chairman.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Dr. Kessler. We have your complete statement and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF DAVID A. KESSLER

Mr. Chairman, members of the committee, it is a pleasure to appear before you as we present the 1996 Food and Drug Administration budget proposal.

As a background for our 1996 budget request, I would like to take a few minutes to reflect on what the FDA is mandated by Congress -- and expected by the American public -- to do, and how it is accomplishing that mission.

The American people have come to expect and rely on the safety and wholesomeness of our food supply, and the high standards of safety and effectiveness of our drugs and medical devices. We are committed to maintaining those standards and meeting those expectations.

This is our core function. FDA's activities cover more than \$1 trillion worth of products, many of which are vital for human health. Our diverse responsibilities include licensing blood banks; monitoring clinical investigations; and reviewing and approving prescription drugs, generic drugs, animal drugs, vaccines, biologicals, medical devices, and food additives.

Our mission, as the nation's oldest consumer protection agency, is to provide the basic public health protection for the foods we eat and the drugs we take. The assurance that FDA is there, everyday, doing its job, is so fundamental to what we know and expect as public health protection, that we have the luxury of taking it for granted. Americans can afford not to spend time worrying about products including toothpaste, breakfast cereal, pet food, contact lenses, vaccines, and cough medicine.

When we inspect manufacturing establishments to make sure they use the materials and processes necessary to produce safe and effective products; when we monitor imported products to make certain they meet the same high standards as domestic products; we succeed at what is FDA's real job -- sustaining the American public's right to confidence and peace of mind in their public health protection.

We have been protecting consumers against an ever-growing number of public health risks for almost nine decades, and we have not done it by standing still. As steady advances are made in science and technology, FDA is constantly being presented with new questions, for which we are committed to seeking and finding new answers. We are also committed to improving the FDA's many activities so that all of its work is done as efficiently and effectively as possible.

In this testimony, I would like to sketch out some of the changes that we have carried out in the last year or two that have enabled us to protect and promote the public health more effectively than ever before.

Let me start with our obligation to make sure that drugs and medical devices are carefully and quickly reviewed for their safety and effectiveness.

In 1992, the Prescription Drug User Fee Act gave us additional resources so that we could speed up our drug and biologic reviews without sacrificing their quality. In last year's testimony before this committee, I described the demanding goals associated with that legislation.

This year I can report that we have not only met all of the goals to date, but in some areas we are substantially ahead of schedule. Our progress is illustrated in several charts attached at the end of this testimony.

The first chart shows that we are solving the problem of long drug delays. In the past, our typical median approval times for drugs was 26.7 months. Last year, we reduced the median approval time for all new drug applications to 19 months. The subset of these approvals which fall under the user fee program were a major contributing factor to this improvement. Sixty percent of the new drug approvals in 1994 were user fee submissions. The median approval time for these approvals was 13.5 months. A further subset of these user fee submissions are those priority applications which represent therapeutically important indications. Here the median approval time was 10.4 months.

As you can see, we are approving important drugs in months, not years.

Furthermore, in connection with PDUFA, we committed to eliminate the backlog of overdue drug applications by July 2, 1995. We are meeting that commitment. The second chart shows that we have brought the overdue backlog down from 696 at the start of the user fee program to just 4 by mid-February of this year.

We have met every single performance measure to date for speeding drug approvals without compromising our standards of safety and effectiveness. And in the future, we expect the numbers will drop even lower.

The third chart shows that we are also working hard to reduce the review times for medical devices without compromising their safety and effectiveness. In January 1994, our median review time for 510(k) medical devices was 160.5 days. By January 1995 we cut the median review time to 98.5 days. However, the slowest 5 percent of 510(k) reviews still take more than 500 days and we are working hard to bring those times down as well. In addition, the backlog of 510(k) submissions (chart 4) has been reduced from 1,824 in January 1994 to 371 at the start of this year.

These significant improvements are partially the result of the \$20 million added to our appropriation in FY 1994 as well as from management initiatives to shift resources and focus on critical areas. There is still much to be done to improve review times on more complex devices, and we are committed to both reducing backlogs and faster review times. These can be accomplished sooner if the Medical Device User Fee Program is enacted this year. We are hopeful that the user fee proposal negotiated last year by FDA, Congress and the medical device industry will provide an acceptable framework for action this year. Clearly, more needs to be done to achieve a level of performance commensurate with the fast growth of our vigorous medical device industry.

Most importantly, we have accomplished all of this without lowering FDA's traditionally high standards for safety and effectiveness. These requirements are regarded worldwide as the gold standard. Upholding these high standards is critical not just to individual patients but to the country as a whole.

Thanks to these standards, American patients and the national health care bill have been spared unnecessary expenditures on products that do not work. And thanks to these standards, the positive U.S. balance of trade for these products remains strong.

All industries regulated by FDA are net contributors to the U.S. balance of trade, but no category of regulated products does so well on foreign markets as FDA-approved drugs. The high regard for U.S. drugs abroad is in part due to our standards for safety and effectiveness. FDA-approved drugs work, and doctors and patients -- both here and abroad -- know it.

Currently, we are implementing one device program that applies user fees, under the authorities of the Mammography Quality Standards Act (MQSA) of 1992. So far, this program is a success. Working in cooperation with the health authorities of three states -- Iowa, Arkansas and California -- and the American College of Radiology, we were able to provisionally certify almost 100 percent of this country's more than 10,000 mammography facilities by the October 1, 1994 deadline.

We have also contracted with 51 state and other jurisdictions to carry out the mammography inspections, and we are training the inspectors. High quality mammography can save lives from breast cancer, and we and our partners are determined to make sure that American women receive the best mammograms obtainable with today's technology.

When it comes to food, our core function is to make certain that the food supply is safe. But we should not underestimate the importance of food labeling. We have implemented the Nutrition

Labeling and Education Act of 1990, and there is now a new food label on almost all food sold in the United States.

The new label has not only replaced frequently exaggerated food claims with scientifically accurate facts; it enables and encourages consumers to select the sort of low-fat, high-fiber diet that helps prevent chronic diseases. We are also seeing evidence that Americans find the new information useful. A survey conducted last fall showed that nearly two-thirds of dietitians and almost 70 percent of their clients changed the food they buy as a direct result of the new label.

The quality of the new nutritional information is very high. Our survey of 5,000 products required to have the new food label showed that 99 percent of the products met that requirement. Our analyses of 300 foods showed that the fat content data was accurate on 94 percent and the calorie count on 93 percent of the packages. Overall, our analysis of a dozen nutrients found 87 percent of the foods to be correctly labeled.

Mr. Chairman, few functions of the agency can be more critical and demand speedier and more vigorous action than detection and elimination from distribution of products that have been contaminated or tampered with.

Only a few weeks ago, we received a call about a baby who had gotten sick -- and had to be taken to a hospital -- after being fed what turned out to be counterfeit infant formula that was being marketed under the label of a legitimate product -- Similac with iron. The last chart at the end of my testimony shows how FDA's criminal investigators uncovered the counterfeit scheme and arrested the first suspect.

The consumer complaint -- one of several received by Ross Laboratories, the manufacturer of Similac -- was the start of an intensive nationwide investigation by FDA in cooperation with Ross and Safeway, the food store chain that had inadvertently sold the counterfeit formula.

We first made sure that the product which was packaged in cans marked with two code numbers was a counterfeit, and then we saw to it that all cans marked with these numbers were pulled from the store shelves. Next, we worked with the press to alert parents that there was a counterfeit formula on the market and that they should check the codes to protect their infants.

At the same time we were notifying the public and doing the scientific analysis of the formula, we launched a nationwide criminal investigation into the counterfeiting scheme.

We were able to trace the lids from Ohio to Rhode Island to California. We traced the counterfeit formula from Chicago to Wisconsin to Los Angeles. We worked with a Minnesota company to trace the scoops. And we worked with the Secret Service forensic lab to determine what kind of printing was used to make the label and traced the counterfeit labels to a suburb of Washington D.C.

Various investigative leads led us to a warehouse in an industrial park in Los Angeles, California. Going undercover, FDA agents observed the infant formula, and canning equipment. Undercover agents watched as employees rented U-Haul trucks and loaded up as much other materials as they could.

Ten days after we received the first complaint, we had pieced together the entire counterfeit scheme, seized tens of

thousands of pounds of the counterfeit formula, and arrested one of the key figures. There will be other arrests.

That is only one small example of FDA's activities that served to protect consumers against a broad range of public health hazards. There are many others.

Last October, FDA proposed labeling for iron supplements that warns users to keep these products out of the reach of children. The proposal, aimed at protecting our children from potentially fatal iron poisoning, was supported by the Consumer Product Safety Commission and a consensus of public health officials and industry groups. And last December, in another step to safeguard pediatric health, the agency announced new measures to provide health care professionals with the information they need to prescribe medications more safely for children.

Mr. Chairman, our improved performance and initiatives are bringing the agency closer to what the administration, Congress, and the public rightly expect us to be: an efficient and dedicated protector and promoter of the public health.

One ongoing project that is significantly increasing our efficiency is the installation of an automated information system that links FDA with the U.S. Customs Service and the import industry and helps us monitor the safety of the vast amount of food, drugs and devices that are annually imported into this country. This information system is now in 55 ports of entry which handle 80 percent of the FDA-regulated imports. Every port we service will be on this system by the end of this year.

The instantaneous communications between FDA, Customs and the import agents has transformed shipments processing from days to minutes. At the same time, the electronic entry processing system enables us to do a better job of screening and detaining violative products and it generates data that helps us analyze long-term trends.

The Administration has proposed user fees for funding the development and installation of the remainder of this system, which is called the Operational and Administrative System for Import Support, or OASIS. This is one of the agency's six strategic information program priorities. OASIS will fully develop and integrate an enhanced nationwide automated network for processing and monitoring nearly 1.6 million import entries per year. OASIS will give FDA staff access to historical information to better target products and firms at high risk, the ability to plan inspections more effectively, and the ability to share findings from inspection and lab analyses with other offices.

We are also vigorously pursuing the international harmonization of regulations and product standards. This effort eventually will increase the protection of our consumers against substandard food and drugs, and will enable our exporters to meet just one set of internationally recognized standards for their products.

Our active participation in the International Conference on Harmonization (ICH), the International Organization for Standardization, and the Codex Alimentarius Commission is bringing encouraging results. Last year, for instance, FDA

published four final ICH guidelines, and we will be publishing seven more guidelines for the organization this year.

All of these diverse activities, Mr. Chairman, had one common goal -- to fulfill FDA's basic obligation to protect and promote the public health as efficiently and effectively as possible.

Turning to FDA's FY '96 budgetary request, we are asking for \$1,025,310,000 which includes \$883,643,000 in budget authority and \$141,667,000 in user fees. These figures reflect two reductions from corresponding levels in FY '95 and several increases necessary for the agency to carry out its primary mission. The highlights of our FY '96 request are as follows:

Maintaining FDA's Current Level of Public Health Protection
+\$9,800,000

FDA relies heavily on a staff of highly trained professionals including medical doctors, inspectors, scientists, reviewers, engineers, and other technical specialists. For FY 1996, FDA is applying a \$9,800,000 increase to its pay and benefits base to cover the anticipated FY 1996 pay increase.

Mammography Quality Standards Act (MQSA) +\$6,500,000 and 35 FTE

In FY 1996, federal and state personnel will inspect 10,750 mammography facilities and conduct 3,200 follow-up inspections. To meet the costs of the program, FDA requests an increase in MQSA authorized inspection user fees of \$6,500,000 for a total of \$13,000,000 and 35 FTEs.

Prescription Drug User Fees Act (PDUFA) +\$5,300,000 and 100 FTE

FDA requests an increase of \$5,300,000 and 100 FTE in FY 1996 and estimates total user fees of \$84,723,000 and 600 FTE to implement PDUFA. As envisioned in the Act, this level of resources will enable the Agency to shorten significantly the time necessary to review new prescription drug and biological product license applications. In FY 1996, 80 percent of filed New Drug Applications (NDA) and Product License Applications (PLA)/Establishment License Applications (ELA) submissions are to be reviewed within 12 months.

Medical Device Review - User Fees +\$23,740,000 and 109 FTE

FDA is requesting \$23,740,000 and 109 FTE in additive user fees, to be collected from the medical device industry. These application fees will provide the agency with the resources that it needs to promptly review device applications. If user fee legislation is adopted, we have committed to making decisions on 510(k) applications within 90 days. Nine-nine percent of all premarket applications are filed under section 510(k). We have also committed, in connection with user fee legislation, to reviewing the more complicated PMA applications within 180 days.

For FY 1996, the user fee goal is to increase the percentage of 510(k) applications completed within 90 days from 52 percent in FY 1994 to 75 percent, and to increase the percentage of first review cycles for PMAs completed within 180 days from 25 percent in FY 1994 to 60 percent. The proposed user fees will also help to increase guidance to industry, strengthen postmarket monitoring, improve the Agency's ability to assess public health risks, and upgrade automation capabilities and integrate program information systems.

Import Inspection Enhancement - User Fees +\$15,000,000

FDA is proposing to collect \$15,000,000 in additive import user fees to fund the Operational and Administrative System for Import Support (OASIS). The system is expected to enable the agency to substantially reduce the risk of potentially harmful foods and other imported products reaching the American market place. The importer/broker community will benefit through faster turn-around times, elimination of large volumes of paperwork, and reduced costs of doing business. OASIS will give FDA staff access to historical information to better target products and firms at high risk, the ability to plan inspections more effectively, and the ability to share findings from inspection and lab analyses with other offices.

Buildings and Facilities -\$9,800,000

The FY 1996 budget request for Buildings and Facilities of \$8,350,000 is \$9,800,000 below the FY 1995 level. The requested \$8,350,000 will enable the Agency to maintain its many facilities nationwide by addressing our most urgent repair and improvement requirements.

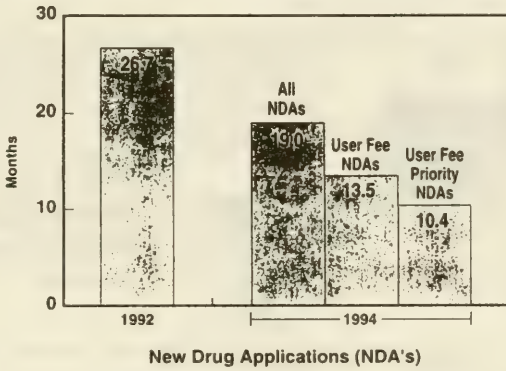
Savings from Management Improvements -\$772,000

FDA's budget authority for FY 1996 is \$772,000 less than in FY 1995 as a result of anticipated Department-wide savings in the Federal Telecommunications System (FTS 2000) and in the Working Capital Fund (WCF) by reducing duplicative work in the regional offices. FDA's participation will result in a savings of \$560,000 in FTS and \$212,000 in streamlined common administrative servicing WCF efforts.

Mr. Chairman, Members of the Committee, FDA is working hard to fulfill its obligation to the American public and deliver the maximum amount of public health protection for each tax payer's dollar we spend. We believe that the requested budget will enable us to continue our mission -- which next year will be nine decades old -- still more efficiently and to the greater benefit of all Americans. We thank you for your support.

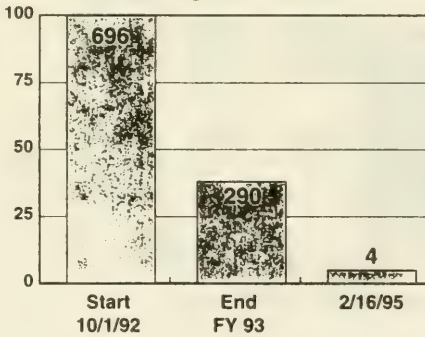
This concludes my prepared remarks. My staff and I are ready to answer any questions you may have.

Median Drug Approval Times



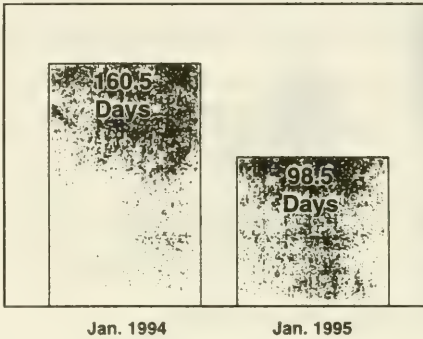
Overdue Drug and Biologic Submissions

Percent of Backlog



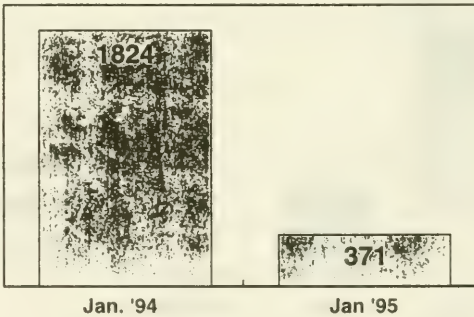
Goal:
Eliminate
Backlog by
July 2, 1995

Median Review Times - 510(k) Devices



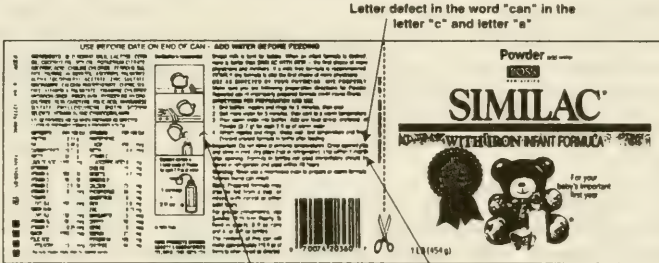
But the
slowest 5% is
still more than
500 days

Overdue* 510(k) Device Submissions



*More than 90 days

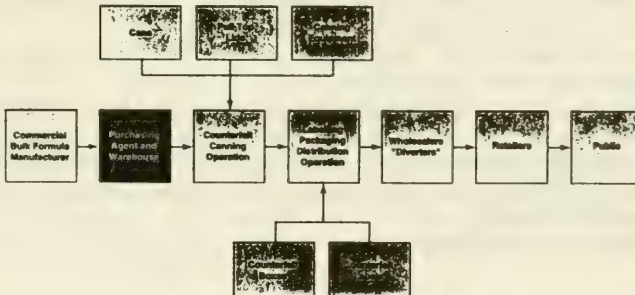
Counterfeit Similac



- Examined by U.S. Secret Service forensic lab
- This counterfeit label was printed by 4 color offset printing
- The "genuine" Similac product was printed by one color offset printing

Office of Criminal Investigations

Counterfeit Similac Infant Formula Scheme



Office of Criminal Investigations

ANTI-FDA ADVERTISEMENTS

Senator COCHRAN. Let me first of all commend you on the outstanding work you have done in connection with the counterfeit Similac situation.

Obviously, you brought your forces to bear on a problem that was a matter of some urgency and brought it to a successful resolution. That is quite commendable, in my view.

There are a number of groups that are buying ads on the radio and putting out the word that the FDA is not really doing its job very well.

I know I, just the other day, heard a radio ad, which I have heard now some additional times on the radio. And I know that there may be more than one association putting out these ads, but one is very specific in the allegations that it is making.

It is identified as the Washington Legal Foundation, and I understand this is a nationwide advertising campaign it is running, charging the FDA with needless deaths resulting from delays in the approval process for drugs and medical devices. And I thought I would bring this up right away to give you a chance to respond to it.

There are some specific statements, such as 3,500 kidney patients died during the 3½ years it took the FDA to approve the drug Interleukin 2. The ad claims the drug had already been approved in nine European countries.

Is there an answer to that that would help explain what the facts are?

Dr. KESSLER. Mr. Chairman, we wrote a detailed response and sent it to the Washington Legal Foundation. And, if I may, I would like to submit that response for the record.

Senator COCHRAN. We would be happy to have that, and we would appreciate your submitting it for the record.

Dr. KESSLER. The number of inaccuracies in that advertisement are too long for me to get into right now. Suffice it to say that the American people have come to expect a high degree of safety and efficacy of the drugs that they take. The statements in that ad, I believe, are misleading.

[The information follows:]

LETTER FROM JAMES A. O'HARA, III, ASSOCIATE COMMISSIONER FOR
PUBLIC AFFAIRS

January 25, 1995

Mr. Daniel J. Popeo
Chairman and General Counsel
Washington Legal Foundation
2009 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Dear Mr. Popeo:

Recent articles, public statements and advertisements of the Washington Legal Foundation and its representatives contain a number of factual errors and misleading representations about the Food and Drug Administration. Some of these errors and misrepresentations have then been repeated by others.

Contrary to your claims, the agency's reviews of Interleukin 2, Tacrine and TPA are examples of how lives were saved and risks minimized by answering important questions about appropriate doses and potentially fatal effects of these promising drugs. In a similar manner, the agency has acted in the cases of the Ambu CardioPump and Sensor Pad to ensure that these products provide people with the benefits claimed for them.

Moreover, your statements and ads fail to recognize the steps taken by the FDA in recent years to make promising drugs available before final approval. In addition, there have been and continue to be significant improvements by the FDA to reduce the time for drug reviews and approvals, as well as device reviews and approvals.

To help you correct the public record and to prevent others from being misled, please consider these facts in your future statements and advertisements:

Interleukin 2

Even before the company sought FDA approval in 1988, the FDA and the National Cancer Institute expanded access in 1987 to Interleukin 2, making it available at NCI-supported clinical and comprehensive cancer centers. The NCI scientist, Dr. Steven Rosenberg, who did pioneering work on this drug, said at the time: "These treatments are still in a developmental stage, and considerable refinement is necessary before their role in cancer therapy can be established."

In its review, the FDA found problems in the manufacturing and proposed administration of Interleukin 2 and found inadequacies in the clinical data which made it impossible to determine which patients were more likely to benefit than be harmed and which of the proposed dosing regimens had favorable outcomes. As a result of the FDA review, the manufacturing, dosing and patient selection were substantially modified to maximize efficacy and decrease toxicity. It should be noted that Interleukin 2 is not a panacea, and the U.S. Pharmacopeia recommends "because of its potential life-threatening toxicities, ...that this medication be used only after careful consideration of risk-benefit."

In fact, the clinical trial data showed a complete remission of the tumor in 4% of the patients. It is also important to note the

serious side effects: nearly all the patients in the clinical trials experienced severe or life-threatening side effects, and the drug-related mortality rate was 4%, a significant risk even for patients with a life-threatening illness.

Moreover, a representative of the drug's manufacturer -- interviewed about your recent ad -- said the mortality rate was "not a trivial matter to be glossed over" and that the 1990 advisory committee that requested more data about the drug before considering approval was not asking "unreasonable questions."

Ambu CardioPump

The assertions of the WLF are contradicted by the published literature. A study reported in a May 11, 1994 Journal of the American Medical Association article showed no significant benefit from using this device compared to traditional CPR with regard to hospital discharge rates, return to baseline neurological function or return to baseline neurological function at hospital discharge. Two additional studies from California presented at a recent cardiology meeting also showed no significant benefit for this device over standard CPR.

The Washington Post recently interviewed one of the investigators for that study, Dr. Michael Callaham. The December 11, 1994 article reported: "One study in Minnesota showed that the device helped to resuscitate more patients, 'but it didn't change how many of them left the hospital alive,' Callaham said." Dr. Callaham went on to say the device needs more study.

Tacrine

In fact, the FDA worked hard to encourage and speed the development of this drug. When an academic investigator reported dramatic results in a very small study, FDA encouraged and worked with the National Institute of Aging and a drug company to carry out a large, multi-center study that would, if it confirmed the early finding, lead to prompt marketing of the drug. The FDA continued this encouragement even when it was determined that the investigator's original study was seriously flawed.

The results of the first large trial were disappointing: at most, there was a small improvement in memory but no detectable difference in the overall condition of persons receiving the drug. Moreover, clinical testing showed the drug causes liver toxicity in a significant proportion of patients.

FDA encouraged the study of the drug at higher doses and in a way to protect patients from the risk of liver injury. Those studies showed that the higher doses were necessary to achieve effects both on a test of memory and attention and on the patient's overall condition. The study also showed that patients could receive the drug safely if the dose was carefully escalated with frequent blood tests to identify patients sensitive to the drug's liver toxicity.

As part of the agency's efforts to make drugs for life-threatening diseases available even before final approval, tacrine was granted "treatment IND" status in February 1992. More than 7,200 patients were allowed to receive the drug while the final studies were completed.

Finally, it should be noted that contrary to the implication in the WLF ad -- "Nobody knows how many died" -- there is no evidence that this drug prevents patients from dying from Alzheimer's or prevents progression of the mental deterioration caused by the disease.

Defibrillators

The American Heart Association, in a letter published in The New York Times on January 21, 1994, has repudiated your use of its name in your advertisements and has called your ad "irresponsible and incorrect." The AHA denies making the claim you attributed to the organization.

It appears from your October 28, 1994 Legal Backgrounder that you based your claim on the statements of an individual who was identified on a television program as chairing an AHA committee. This same individual was a paid expert witness for the defibrillator company in a recent lawsuit between the FDA and the manufacturer. The company was ordered by a federal court to comply with the Medical Devices Reporting (MDR) regulations and, under court order, has promised to improve its MDR practices; the court also ruled that the company had improved its good manufacturing practices and there was no longer a basis for enjoining the company on that issue. At no time during this court case was the company prohibited from shipping its devices as your ad states.

Sensor Pad

The manufacturer has not provided to the FDA any data to show that the device does what your ad claims: the magnification of the sensation of lumps in a woman's breast. In fact, expert examiners on an advisory committee to the FDA raised the question of whether the device actually decreases the ability to detect lumps. And the manufacturer has failed to provide the FDA -- despite repeated requests -- with data that this device will not make it more difficult for women to detect breast lumps than the conventional breast self-examination. Given the seriousness of the breast cancer problem in this country, the reason to require this information is simple and compelling: The FDA wants to be sure that using the device will not cause women to delay seeking medical attention.

Most of the data presented so far to the agency by the manufacturers comes from women using the device on foam models of breasts. The advisory committee said the manufacturer should:

- o Do tests with women using the device on their own or other's breasts to determine if it enhances their sense of touch.
- o Do tests -- with and without the pads -- with physicians examining women about to undergo biopsies.

TPA

A proven safe and effective drug, with the information necessary for doctors to use it safely, was the result of the FDA review of this drug. TPA is intended to dissolve the blood clot blocking a coronary artery during a heart attack. Studies of TPA used a dose of 150 mg and showed that it led to a high rate (about 1.5%) of bleeding in the brain that was usually fatal or badly disabling. The manufacturer proposed a lower dose that would still dissolve

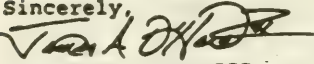
the clots and was expected to lessen the risk of intra-cranial bleeding. The approval for this drug came in November 1987, only seven weeks after the manufacturer submitted the last critical data that had been requested during a May 1987 advisory committee meeting. During that meeting, the committee requested data on whether TPA provides a beneficial effect on survival or heart function and a detailed analysis of the intra-cranial bleeding rate at the recommended dose in a large study. The final questions resolved included the issue of dosage and intra-cranial bleeding and an accurate assessment of TPA's benefits despite its risk of stroke.

It should also be noted that while TPA was being reviewed, another drug -- streptokinase -- was already on the market and available for heart attack patients if physicians chose to administer it on the basis of their review of the literature.

This is not a comprehensive reply to recent WLF statements and advertisements. It should indicate, however, your need to be more accurate and factual in the future. If discussions and debates in the coming months on drug and device regulation are to be of value, they will need to be conducted with rigorous intellectual honesty and scrupulous attention to the facts.

If FDA can assist you in that regard, please feel free to contact my office and we will attempt to provide you with appropriate information and references.

Sincerely,



James A. O'Hara III
Associate Commissioner
for Public Affairs

DATA LACKING ON CARDIOPUMP

Senator COCHRAN. The charge also includes some statements about a cardiopump, that 14,000 heart-attack victims so far have died who could have been saved by the cardiopump during the 2 years the FDA delayed approval.

Dr. KESSLER. That statement is outrageous, Mr. Chairman. That cardiac pump has been the subject of a number of stories. It has been discussed widely in the public. The data is not there to show that it saves anyone's life.

All I want, before we approve a device, is to show that it works, to have the data.

Mr. Chairman, I am a physician. I want to get products out there that work and are safe and that are going to save lives, and so does everyone at the agency.

MEDICAL DEVICE USER FEE

Senator COCHRAN. One thing that is requested in your budget is a user fee, a new user fee, for medical devices. And I suppose one of the reasons is to fund more staff who could be engaged in the review of applications for approval of medical devices, is that correct?

Dr. KESSLER. Absolutely, Mr. Chairman. We are working hard. You previously appropriated funds which we put toward speeding up the device approval process. And you see the results today in those charts.

The backlog is coming down. The median time is coming down. But for the more complicated devices, the times still need to come down further.

Senator COCHRAN. While you indicate that the backlog has decreased, there is some indication that the time for review of the applications for approval of the medical devices has actually increased. Why is that?

Dr. KESSLER. Can we go back to the median review times? Let me explain what we have solved and what we have not solved and what we still need to do.

The median approval time in January 1995 for medical devices falling under section 510(k) of the statute—for all intents and purposes, 99 percent of devices fall under the 510(k) group—was 98.5 days.

That means that 50 percent of devices were approved in less than 98.5 days. That is a major improvement. We are not going to be able to assure safety and efficacy of medical devices in much less time than 98 days. In fact, in some respects, that is remarkable.

Mr. Chairman, the problem we need to continue to work on is that other 50 percent. Although the median is down, we need to focus on the more complex devices that are taking, in some cases, up to 500 days.

We need to move that upper percentile review time down even further, and that is why I would strongly advocate the Medical Device User Fee Program.

Senator COCHRAN. Some of the industry groups have come to me and said the number of applications for medical device approvals has been going down, and the review time has been going up.

And that does not look the same as your chart. That is why I bring that up.

Dr. KESSLER. I would be happy to submit the exact number of submissions on medical devices for the record.

Senator COCHRAN. Well, you were talking about 510(k) approvals.

Dr. KESSLER. 510(k)'s.

Senator COCHRAN. And that is what I am talking about.

Dr. KESSLER. I would be happy to submit those exact numbers for the record.

[The information follows:]

NEW 510(K) NOTIFICATIONS

	Fiscal year—			
	1991	1992	1993	1994
Original notifications per year	5,770	6,509	6,288	6,434

Senator COCHRAN. Is it not true that the number of 510(k) applications has come down?

Ms. SUYDAM. It has been staying about the same for the last 4 years. We have not had a decrease or an increase.

Senator COCHRAN. OK.

Ms. SUYDAM. It is about 6,000.

Senator COCHRAN. Well, you know, getting the facts is hard. Let me tell you my dilemma. I hear these ads and I see these numbers in here.

And, you know, some industry group gives me this, figures supplied to industry by the Office of Device Evaluations since 1989 indicate that, in fact, device applications are decreasing while the time for reviews is increasing.

And that is not accurate?

Dr. KESSLER. The 510(k)'s—let me let Dr. Burlington, who is Director of the Center for Devices—

Senator COCHRAN. I am getting a lot of misinformation from a lot of people on this whole thing. You have ads out there. You have people making allegations and folks mad at you. And I would like to get to the truth. It is hard to find out what the truth really is.

Dr. KESSLER. Dr. Burlington.

Dr. BURLINGTON. Mr. Chairman, the 510(k) applications, the abbreviated applications have, in fact, been quite steady the last 4 years. We tracked them quite closely.

And the ratio of approvals to nonapprovals has also been quite steady. Times have improved as Dr. Kessler previously mentioned.

For the comprehensive applications, premarket approval applications, they went down from about 75 or 80 where they had been through much of the late eighties, early nineties, to about 40 a year.

There are a number of reasons for that. One of them is that we reclassified a number of those products, including sutures, including contact lenses, including magnetic resonance imagers into the 510(k) category.

Senator COCHRAN. OK. That helps. That is what PMA stands for, right?

Dr. BURLINGTON. Yes, sir.

Senator COCHRAN. OK. But, you know, to have a hearing where we really get to the bottom of some of this, I do not know how we can do it without having the industry people here.

But I ask them if they would like to come and give us specific examples, and they say, no, no, no, no, no. [Laughter.]

Not me, not me—

Dr. KESSLER. Mr. Chairman—

Senator COCHRAN. Because, you know what? They are afraid. You know, if they come up with some charges or some allegations that things have not been handled just right, they are afraid of the repercussions. I think that is part of it. Maybe I am guessing.

Why do you think they would not want to come in here?

Dr. KESSLER. I certainly would not want to conjecture the answer to that, Mr. Chairman. [Laughter.]

Senator COCHRAN. OK.

BALANCE IN FDA ACTIONS

Dr. KESSLER. Let me simply say that everything we do at the agency involves a balance. On the same given day, I am going to be criticized for moving too fast and moving too slow.

And that goes with the territory. You can always criticize us for not being thorough enough, and you always can criticize us for being too thorough.

You know, everybody wants access to every product instantly today. If we raise a question about safety, we are holding up progress. People want access today.

FDA, you are holding up the product, until something goes wrong, Mr. Chairman.

And then it goes, FDA, where were you?

So everything we do is a balance. And what you are seeing in those ads are criticisms on one side. And those ads are not balanced because they do not tell the basic fact that our job is not just to open the regulatory gates.

I do not believe that the American public wants to reduce the level of safety, or efficacy standards that we have built up over the last 50 years.

Senator COCHRAN. Well, you are bound by the law.

Dr. KESSLER. Absolutely.

Senator COCHRAN. You have responsibilities under the law. And Congress, of course, can change the law.

Dr. KESSLER. Absolutely.

Senator COCHRAN. And in the process of regulatory reform or review of regulations to see whether they are unnecessarily burdensome or restrictive or costly, then we can make those changes in the law.

Dr. KESSLER. Absolutely.

Senator COCHRAN. Are there any changes in the law that you would recommend that we consider making to help alleviate the unnecessary costs, delays, or burdens of this system?

Dr. KESSLER. It is a very good point, because while we want to protect the standards of safety and efficacy, our laws were enacted some 50 years ago, and some of our regulations are that old. What was good back then may not be good today.

So we have embarked, over the last several months, on a very intensive review of how we can streamline, how we can reduce regulatory burden without lowering the standards.

We are working very hard with the Vice President, as part of the regulatory reform. I would hope in the next several months, Mr. Chairman, we could come back and make those suggestions to you.

USER FEES

Senator COCHRAN. Well, I hope you will, because we would like to be a part of the effort. I know this is the Appropriations Committee, and we do not have legislative responsibility, so it is really not up to this committee to take an active role in changing the law.

We are trying to make sure the funds are available where they are needed and to try to allocate resources that are scarce for those functions of government that are very important.

And this, of course, is an area that is very important to the American public and to the average American citizen. So we want to be very careful to make sure that you have the resources to do the job you are required to do under the law.

And the user fee matter, of course, is terribly controversial. I mean, is it a public service that you are providing, and should a single industry have to pay for a public service, something that benefits the entire general public?

And that is a philosophical debate that we have been engaged in, as you know, for some time now. And how we sort that out, I don't know. But we are going to work hard to do it in a fair way.

Dr. KESSLER. We worked hard. I had some reservations entering into the Prescription Drug User Fee Act. But several years ago, the Congress, the pharmaceutical industry, and FDA got together and decided that the best way to speed up drug approvals was through user fees. It allowed us to hire additional people without lowering standards.

And the numbers you have seen today show that the Prescription Drug User Fee Program has been a success. I would ask you to consider looking at the lessons we have learned from that Prescription Drug User Fee Program and apply them to medical devices, as appropriate.

CORE PROGRAMS

Senator COCHRAN. I think we also need to look at maybe a definition of what the FDA's core programs are. I know you have probably done this, your staff, and have tried to identify priorities.

You know, what are your priorities? What are your priority responsibilities? Because you cannot spend as much time doing everything as you would like to spend. You cannot have the staff allocated to every single solitary possible inquiry or undertaking that somebody might dream up.

How do you do that? And should we try to define, as part of the regulatory reform process, your core responsibilities and leave some of these other things to other agencies?

Dr. KESSLER. Our jurisdiction, Mr. Chairman, is vast. It is a trillion dollars' worth of products; 46,000 food establishments come under our jurisdiction, 19,000 medical device establishments, 15,000 human drug establishments, animal drug establishments, biological establishments, 3,000 radiological health establishments, vitamin manufacturers, 1,800 cosmetic manufacturers, color additives, clinical investigators, blood suppliers.

The scope of our jurisdiction is enormous. I was watching "60 Minutes" one day to find out that we had jurisdiction over police radar guns, because they emit an electromagnetic field.

In the end, we need, and we do, to focus our resources based on those products that present the greatest risk. But it is very hard to say that we are not going to focus on the safety of cosmetics, the safety of animal drugs, the safety of our blood supply.

So in some ways, we do focus and we do prioritize. But I cannot come before you and credibly say, Mr. Chairman, we are going to stop looking at the safety of color additives, or we are going to stop looking at the safety of pesticides. We have, over the last decade or so, tried to scale back.

In fact, if you look at the non-user fee programs next year in the budget, we will end fiscal year 1995 up with about 6 percent fewer employees than were on board in those programs in July 1994. This translates into a less than 2-percent reduction in FTE's. So we are scaling back.

But if you look at the products that come under our jurisdiction, the American people want assurances that those products are safe and that they work. And I just cannot say with good conscience that we are not going to look, we are not going to be concerned about any of those particular areas.

COSMETIC HOTLINE

Senator COCHRAN. My staff just brought to my attention this hotline that you plan to establish with a staff, I suppose, having to handle it. It is a cosmetic hotline. If something is wrong with your cosmetic, call in a certain number.

Dr. KESSLER. I wanted to——

Senator COCHRAN. Do you still have that?

Dr. KESSLER. I wanted to do that, Mr. Chairman, and there is some discussion underway. Currently, we have about 30 employees in our Center for Food Safety and Applied Nutrition who, among other things, evaluate the safety of cosmetic products, and offer consumers and manufacturers guidance on the safe use, testing, and sanitary manufacture of cosmetics. In addition, the agency uses about 24 field staff-years to ensure that cosmetic products are prepared, packed, and/or held in accordance with current good manufacturing practices [GMP].

We devote relatively few resources to cosmetics, particularly considering that American consumers spend nearly \$40 billion on these products each year. However, that probably makes sense, because if you look at the risks associated with these products, they fall in the lower end. There are allergic reactions with certain cosmetics today. Some are more potent. The alpha hydroxy acids do, in some instances, cause burns.

There is a whole new field that is developing. Some refer to that as cosmeceuticals, where there are cosmetics that also have pharmacological action.

So what I suggested was that since we do not have a lot of resources to devote to cosmetics, perhaps we should increase surveillance of cosmetics by having consumers let us know if there are some problems.

What are the allergic reactions out there? Are there any adverse events?

Let me first know the problem. How do you do that? I suggested we set up a way that people could phone in adverse reactions. Nothing regulatory about it, just to know what the problems are and if we need to do something.

There were a number of people opposed to that, and we are working that out.

People are saying, Don't do it at all.

People would prefer us not looking. We need to work it out.

MEDWATCH

Senator COCHRAN. How about the Medwatch Program that you have instituted? Is that working?

Dr. KESSLER. It is an excellent program. That program is trying to get physicians and all health professionals to help us report adverse reactions.

You know, Mr. Chairman, there is a notion in this country that up until the day FDA approves a product, that product is not safe or effective. And all of a sudden, on the day we approve a product, that product is safe and effective forever more. That just is not the case.

We put out products, approved products, based on 1,000 patients, perhaps, in the clinical trials or even 5,000 or even 10,000 patients.

What happens if the adverse reaction, a very serious adverse reaction, happens in incidents of 1 in 20,000, or 1 in 50,000? We may not pick that up in the clinical trials.

So we need to get the physician and health professional community involved in reporting adverse reactions. It is something we started several years ago, because doctors and other health professionals did not know where to report or how to report, and we did not make it easy for them to report.

So we engaged in this partnership. We have the pharmaceutical industry, the health profession community, the AMA, everybody, looking to help us evaluate and make sure the drugs are safe and remain safe.

ANIMAL DRUG REVIEW

Senator COCHRAN. In our part of the country, there has been some concern expressed about the delays in the approval of animal drugs.

The statistics that I have been given is that the FDA has only approved six totally new drugs for all animal species in the past 5 years. In that same period, at least 10 important drugs for the poultry industry alone have had their approvals removed by the FDA.

And some of these drugs, of course, as usual, are readily available overseas. Are the chickens in France healthier than the chickens in America?

Dr. KESSLER. No; I promise you that while I yield to my colleague, Mike Taylor, who has left FDA to go run FSIS, I leave poultry to him. Let me introduce you to Dr. Stephen Sundlof, Mr. Chairman, who is the new Director of our Center for Veterinary Medicine.

The issue you raised is an important one and is something that is of concern to me and Dr. Sundlof.

Senator COCHRAN. Welcome, Dr. Sundlof.

Dr. SUNDLOF. Thank you, Mr. Chairman. I think your concerns are concerns that I very much share. I think, once again, the information you received is incomplete. Just in the past year, we approved 36 new animal drugs.

But there is a critical need for drugs, especially in the area of food animal production. And especially in your State of Mississippi, we have been working very closely with the Catfish Farmers of

America to try and provide incentives for companies to invest in the research and development that will be necessary to take these products to market.

We have had a very synergistic relationship. In fact, we are further ahead in that industry probably than any others. Because the catfish industry and the aquaculture industry in general does not enjoy a market that is close in size to the chicken or turkey industry, research and development of needed drugs has been slow to evolve. Yet aquaculture is an emerging industry that desperately needs drugs.

Fish present a particular problem in that the body of knowledge on pharmacology is minimal and in most instances you can just take the normal pharmacology books and throw them away, because they do not apply to fish.

We are learning new science every day about how fish metabolize drugs, what kinds of residues are left. And we are doing this in cooperation with the universities and the affected industries, the catfish industry, talopi industry, bass industry, trout, et cetera.

And through this working coalition, we are working together, so that the industry is actually involved in providing some of the data that we need to approve these drugs.

We understand that there are some critical areas out there. We are in the process of totally reengineering the way we approve drugs to make this process more accessible.

We think that the problem has largely been one that the costs are so excessive that only a few drug companies have the wherewithal to invest in animal drug development. And we think that is not acceptable, because there are too many animal drugs needs out there, and we are not meeting those needs based on our current process.

So we are totally reengineering the process, and it is our highest priority.

ANIMAL DRUG USER FEE STUDY

Senator COCHRAN. There is a requirement under the law, as I understand it, to have approval applications for animal drugs acted on within 6 months.

Is that something that should be changed? Is that unrealistic? It seems to be ignored.

Dr. KESSLER. Mr. Chairman, Congress directed us to look at the animal drug approval process and look at the question of how we can speed that up and look at the question of user fees.

We submitted the report, I believe, in November of last year. And perhaps some discussion on that report and these issues is worth doing.

Senator COCHRAN. Well, has any action been taken by FDA as a result of that study? We received it, right enough, and maybe we should be doing something like changing the law.

Dr. KESSLER. Well, we would be happy to work with you to look at animal drugs. Again, they are a very important part of our regulatory responsibility.

Senator COCHRAN. Well, there were some problems identified. My notes here show that in the current animal drug approval process, there has been inactive review resources—that is why you are here

asking for money, I guess—a growing workload, because there are more applications, and low quality applications submitted by the industry. That was also a problem.

Dr. KESSLER. It is more complex, Mr. Chairman, on animal drugs than it is in human drugs. You are dealing with fewer firms. The capital base of that industry is not the same as the human pharmaceutical concerns.

And the solutions that we have found in human drugs, in speeding up that review process, I don't think are necessarily 100 percent extrapolatable to the animal drugs. We need to do more.

Again, most people, when they think of FDA, do not even realize that we review animal drugs. They may say: Why do we review animal drugs? It is a critical responsibility, not only for the safety of the animal, but animal drugs—

Senator COCHRAN. People eat the animals.

Dr. KESSLER. People eat the animals, and drug residues could remain. That is why it is so important.

ANIMAL DRUG REVIEW RESOURCES

Senator COCHRAN. Let me ask you this: In looking at the way you are allocating your resources under this budget proposal, you are going to actually have a reduction in the full-time equivalent staff for the animal drug approval process.

Dr. KESSLER. We will, and it is something that concerns me. I go into it with my eyes wide open, but it is something that we need to put on the table.

We have basically found the answer to speeding up drug approval, human drug approval, and that is the user fee program. And it is a success. We are approving drugs quicker than ever before.

The claims in that ad, for example, that it takes years, really refer, for the ones that are correct, to an agency of many years ago. We are speeding up the drug approval process.

But the concern is about the programs that are not user fee programs and the reduction in resources in those programs. If we only keep up in user fee programs, what about the programs that do not have user fees? That concerns me.

BASE FULL-TIME EQUIVALENTS

Senator COCHRAN. You know one thing that is kind of weird is that when you add people, the FTE's, with the user fee funds that you get, then you have to offset that by reducing your base of FTE's in other areas.

Dr. KESSLER. Well, we are asking—

Senator COCHRAN. Why are you doing that?

Dr. KESSLER. Well, Mr. Chairman, we have a responsibility to be as efficient as we can. Every dollar of taxpayer money must be spent in such a way that it provides the maximum amount of public health protection. I do not want to grow one iota past what is necessary to protect the public health. We are using taxpayers' dollars.

But the bottom line is—the hospital I used to run in the Bronx had a budget as large as the FDA, and we only had to take care of portions of the Bronx, let alone the safety of all foods, except

meat and poultry, all drugs, all medical devices, blood, and vaccines throughout the United States.

We are a relatively small agency, when you look at other agencies. The jurisdiction is vast. I think we can do it, Mr. Chairman, and we continue to do it as efficiently as we can.

Senator COCHRAN. Well, it is a big challenge for us to have to decide how many dollars are available under this budget to your agency and how we make up the difference between what the needs are and the shortfall in resources.

But I assure you that we will be working closely with you to try to resolve these issues in a way that serves the public interest. And I think that is what our mission is.

I know there are a lot of players in this game—the pharmaceutical companies, the food industry, the medical device manufacturers, the meat and poultry folks. Well, you don't have the inspection in that last case, but—

Dr. KESSLER. Everything else.

PRIVATIZATION

Senator COCHRAN. The drugs are involved in those industries. Well, I have a bunch of questions. I have a whole notebook full of questions here, and there is no way for us to discuss all the issues here today.

But in terms of the medical device industry, to just sort of wind this all up, I guess, there is some suggestion that FDA's device approval process should be privatized and linked to the less stringent standards of other countries. What is your reaction to that?

Dr. KESSLER. Mr. Chairman, I don't believe that we should lower our standards for safety and effectiveness. I don't believe that as a physician, because when I use a device, when a heart valve is implanted, when a spinal fixation device is implanted in the back, you want to know that it works.

Mr. Chairman, if you look at, for example, the pharmaceutical industry, it is one of the most competitive, if not the most internationally competitive, industries that we have.

And one of the reasons why that is so, I believe, is that when a drug is sold in this country, after it has been approved by the FDA, it works.

And the fact is, if you go to many countries abroad, you see that there are many drugs that are being sold that do not work. Imagine our health care budget paying for things that did not work.

High standards, the standards that we have built over the last 30, 40, 50 years really result in the fact that a drug, when it is approved in this country, becomes an international blockbuster overnight. I think standards are OK. In fact, I think they are vital in the end to our national competitiveness.

Senator COCHRAN. Well, I think you make a very good point, and I agree completely, that it is one of the distinguishing features of our system here.

And it has enabled our pharmaceutical industry, for example, to become one of the major exporting sectors of our economy. You know, they sell tremendous quantities and volume in overseas markets, and it is growing. The future is very bright for those industries because of that.

Let me ask you this: If it would not do, in your view, to privatize the medical device review process, is there any other function of FDA, something that you are now undertaking, which could be done more expeditiously, and at less cost, by some private entity rather than FDA?

Dr. KESSLER. Mr. Chairman, I am open to looking at all good ideas, including privatization, where appropriate. We are working hard, and we would like to come back to you to talk about where we think privatization may make sense. There may be some areas in the medical device arena where it does make sense.

Let me just tell you about some of the concerns that I think we need to be careful of and we need to think about as we talk about privatization.

Some have suggested that you allow companies to review their own product. I think in the end the American people will not allow that to happen, because that really is as blatant a conflict of interest as one could have. So we have to be careful that we maintain our standards and our standards of integrity.

But we also have to prevent forum shopping. Go privatize, go to a reviewer that you like, choose your reviewer. Well, are you going to choose the reviewer who has the lowest standards? We have to make sure that privatization does not become synonymous with just lowering the standards.

If we can look at privatization and keep the standards that we have had, I am open to all good ideas. And, in fact, we are working on some of those ideas, and we would like to come back to you.

Senator COCHRAN. Well, I look forward to that discussion. I think it fits with the definition of core programs that we have already mentioned earlier in this hearing and a review of the priorities of the FDA.

You cannot do everything, because you don't have the funds to do everything, or spend as much time as you would like doing everything. You have to make tough choices, and so do we. So we will try to work together and make sure that we are serving the public interest in the process.

Dr. KESSLER. Thank you, Mr. Chairman, very much.

SUBMITTED QUESTIONS

Senator COCHRAN. There may be other questions that we will submit in writing. We hope that you will be able to respond to them in a timely fashion. We thank you for being here and for your full cooperation with this committee.

[The following questions were not asked at the hearing, but were submitted to the agency for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

FDA STAFF YEAR CHANGES

Question. The fiscal year 1996 request proposes a net increase of 82 full-time equivalent (FTE) positions in FDA's staffing level from the fiscal year 1995 level. Collections from authorized user fees (i.e., the Prescription Drug Act User Fee and Mammography Quality Standards Act user fee are claimed to provide funding for an additional 135 full-time equivalent positions. Collections from the proposed medical device user fee would fund an additional 109 full-time equivalent positions. This 244 FTE position increase funded by user fees is to be offset by a reduction of 162 FTE positions through position absorptions.

The Prescription Drug User Fee Act sets specific funding level requirements for the FDA before FDA can collect user fees from industry. In light of the fact that the new medical device and import inspection user fee proposals are also described to be additive, I assume that these proposals intend to give protection to base funding and staffing levels for these activities. As a result, it is obvious that staffing levels for non-user fee protected programs and activities are suffering a disproportionate share of the reductions required by the President's effort to streamline federal employment. Is this of concern to you Dr. Kessler?

Answer. FDA is taking its proportionate FTE staffing reduction within the Department implementing the President's initiative to streamlining the Federal government. It is correct that those FTE which carry out the user fee function in the specific activities mentioned have been exempted from the FTE reduction. However, the majority of the decreases are being taken across the board, primarily from administrative positions. While I do have some concerns, I believe that the FDA will continue its high quality work and maintain its responsibilities of protecting the public's health.

Question. What is the justification for the proposed 70 FTE position reduction which is being proposed for FDA's food program? What is the justification for the proposed reduction of 12 FTE positions for FDA's animal drugs and feeds program? What is the justification for the reduction of 7 FTE positions for the National Center for Toxicological Research? Please indicate from which activities these position reductions will be taken.

Answer. In response to the initiatives of the Vice President and the National Performance Review, and the Department's streamlining initiatives, FDA has been seriously engaged in analyses and reviews to support our

own streamlining initiatives. All of FDA's programs are involved in evaluating how the Agency can operate more efficiently and effectively while still carrying out its mission of protecting the health of the American people. Non-user fee FTEs in each of FDA's activities are reduced across the board. The estimates as presented in our FY 1996 Budget request which follow are estimates.

Food Safety and Nutrition (70): 27 from Chemical Safety of Foods, 33 from Microbiological Safety of Foods, 9 from Nutrient Quality and Food Labeling, and 1 from Cosmetic Safety and Labeling.

Animal Drugs and Feeds (12): 5 from Pre-approval evaluation, and 7 from Monitoring of Marketed Drugs and Feeds.

NCTR (7): 4 from integrated research and 3 from methods development.

Question. What assurance can you provide to those paying Prescription Drug Act User Fees that the additional positions paid for through user fee collections will be added to the base and won't be used to substitute for positions being lost through absorption?

Answer. The Prescription Drug User Fee Act provides specific criteria for crediting and the availability of fees in Section 736 (g) (2). As your question suggests, the fees are only to be collected and available to defray increases in the costs of the resources allocated for the process for the review of human drug applications (including increases in such costs for an additional number of full-time equivalent positions in the Department of Health and Human Services to be engaged in such process.) The Agency has very thoughtfully implemented this section of the Act and, as required by the Act, submits a comprehensive Financial Report detailing answers and their allocation in support of the process for review of new human drugs and biological products.

[CLERK'S NOTE.--The report has been received by the Committee.]

PROGRAM MANAGEMENT STAFFING

Question. Would you please justify the proposed 24 FTE position increase from fiscal year 1995 in FDA's program management staffing. Please provide a breakdown, by activity and office, of FDA's program management staffing, in terms of funding and staff years, and indicate the changes proposed for fiscal year 1996 as compared to each of the last five fiscal years.

Answer. The 1996 budget request shows a net increase in program management staffing by 24 FTEs over 1995. While not apparent in the budget charts, Program management is facing a reduction of 10 FTE due to streamlining measures. In addition, the request reflects a transfer of 28 FTE from the Department's Regional personnel servicing offices and a transfer of 6 FTE from the Office of the Secretary.

The Department, in an effort to reduce duplicative work in the regions, is closing regional offices and transferring those personnel functions to the various agencies within the Department. It was decided by the Department that 28 of these regional personnel would be transferred to FDA.

I will be happy to provide for the record a breakdown of the program management activity, in terms of funding and staff years, from 1990 to our proposal for 1996.

[The information follows:]

Program Management

<u>Year</u>	<u>Dollars</u> (million)	<u>FTEs</u>
1990	36.9	348
1991	39.6	348
1992	43.7	362
1993	42.8	362
1994	42.8	356
1995 est.	43.0	353
1996 est.	43.4	377

OFFICE OF THE COMMISSIONER STAFFING

Question. How many people are currently employed in the Office of the Commissioner? Please give me the staff year levels for the office in each of the past five fiscal years and the level proposed for fiscal year 1996.

Answer. I will be happy to provide for the record a table showing the staffing for the Office of the Commissioner for 1990 through 1996.

[The information follows:]

Office of the Commissioner

<u>Year</u>	<u>FTEs</u>	<u>% of Total FDA Staffing</u>
1990	915	11.7%
1991	995	11.7%
1992	1,064	11.8%
1993	1,075	11.7%
1994	1,102	11.6%
1995	1,168	11.3%
1996	1,150	11.0%

Much of the increase in the Office of the Commissioner over the last five years has been in administrative positions supporting the overall growth of the Agency. For example, personnel administrative positions to support growth in staff, facilities administration to support new buildings, and financial management to implement user fees. The Agency has also picked up administrative responsibilities formerly performed at the Department or PHS levels. These functions are now being streamlined through automation, increased delegations to the Centers and other reinvention initiatives as noted in the Agency's streamlining plan.

OFFICE OF PUBLIC AFFAIRS STAFFING

Question. How many people are currently employed in FDA's Office of Public Affairs? Please give me the staff year levels for the office in each of the past five fiscal years and the level proposed for fiscal year 1996.

Answer. I will be happy to provide for the record a table showing the staffing for the Office of Public Affairs for 1990 through 1996.

[The information follows:]

Office of Public Affairs

<u>Year</u>	<u>FTEs</u>
1990	70
1991	70
1992	72
1993	71
1994	70
1995	69
1996	67

TOBACCO.

Question. What number of staff years and level of funding is FDA currently allocating to studying the regulation of tobacco products?

Answer. A small, varying group of Agency employees have participated in the Agency's ongoing investigation and review of nicotine-containing tobacco products. All Agency staff working on this project, have done so on top of current responsibilities and duties. As a result, while it is not possible to reliably calculate a specific cost of the investigation, it would be relatively small. Out of an Agency of about 10,000, only a few dozen individuals have been involved in the investigation.

Question. How does this compare with the level of resources devoted to the study of tobacco products in each of the last five fiscal years?

Answer. Because the Agency is organized around broad product categories such as drugs, devices, and foods, it is not possible to reliably estimate the resources that may have gone to tobacco work done in past years. While some work was done during those years in responding to petitions on tobacco and examining specific nicotine-containing products, the current investigation is an increase over past efforts.

COSMETIC HOTLINE

Question. Is it true that a cosmetic hotline has been established? What is its function? How many people are involved in staffing the hotline?

Answer. Last year the Agency funded on a one-time basis through the Office of Cosmetics an initiative to design and establish an enhanced cosmetic adverse reaction experience reporting mechanism. The Agency set aside approximately \$600,000 for this initiative through contract. Under the proposed initiative, the contractor would provide staff needed to carry out the proposal. However, a cosmetic hotline has still not been established.

The Agency is seeking to increase surveillance of adverse reactions to cosmetic products. Our goal is to insure we have adequate and accurate information to protect consumers and to manage our cosmetic program. As you know, FDA is responsible for overseeing the safety of the nation's approximately 40,000 cosmetic products marketed by 1,500 to 2,000 different firms with annual wholesale sales of about \$20 billion. We currently do that with a relatively small office of about 30 people.

An option for increasing surveillance that we believe would provide the best information, for the least cost, and the least burden to companies, is establishing an 800 reporting line for consumers, supported by a very modest public education effort. Other alternatives include requiring companies to report serious adverse reactions to FDA, something they currently do not do.

There is a voluntary industry reporting system, but the information is provided only once a year in summary form. It provides a general sense of the number of adverse reactions, but does not provide specific information on the nature of the reaction in a timely fashion, and thus is of little use in assisting the Agency to avoid further consumer injuries should a problem occur with a specific product. To do that we must now rely on consumers or companies to choose to alert us.

The hotline initiative would improve the current situation by making it easier and therefore more likely that consumers will call. Our proposal is supported by the American Academy of Dermatology and the National Consumer's League. We have sought, and continue to seek the support of industry.

A recent problem with Rio Hair Naturalizer System, illustrates the problem with the current system. Rio, a Brazilian import, was marketed with the promise of giving African-Americans lustrous, silky hair. In reality, it resulted in more than 2,000 consumer complaints that the product caused their hair to fall out or turn green. Almost all of these reactions occurred between June and November, 1994, but virtually all of the complaints came to FDA in late November only after press accounts advised consumers that FDA is the government agency that oversees cosmetic safety. A principle goal of the cosmetic reporting initiative is to educate consumers to let FDA know if they have a serious problem. Had Rio users had this information sooner thousands of injuries could have been prevented.

We are considering this program at this time because of changes in the types of cosmetic products, especially those used most frequently by women, promoted in the marketplace. Companies, seeking more effective products, have begun introducing new ingredients such as alpha-hydroxy acids in skin moisturizing creams, and aminophylline in a product known as "thigh cream." These new ingredients differ from more traditional cosmetic ingredients, because they are biologically active and achieve their effect by causing changes in much deeper layers of the skin. While these new ingredients hold the promise of more effective products, because of their mode of action they are also potentially much more likely to cause severe reactions. Rather than merely treating these new products as drugs, we were seeking to improve our monitoring of the marketplace.

Question. Could resources in these areas be moved to more critical areas of devices, drugs, and biologics?

Answer. The Agency awarded the Office of Cosmetics \$500,000 in FY 1995 for developing and operating an

enhanced cosmetic reporting system. The options available to the Agency should we decide not to go forward with a cosmetic reporting initiative are 1) to terminate the contract which would result in the remaining funds being returned to the Treasury, or 2) it could attempt to redirect the contract to another area of interest to the Office of Woman's Health, although the contractor was selected for their expertise in the areas relevant to the current project.

MAMMOGRAPHY QUALITY STANDARDS ACT

Question. For FY 1996, FDA is requesting an additional \$6,500,000 and 35 FTE positions from the FY 1995 level for a total of \$13,000,000 in user fees to continue implementation of the Mammography Standards Act.

The budget justification indicated that FDA issued a provisional certification to all mammography facilities by the end of FY 1994. What is the number of mammography facilities which have been certified?

Answer. As of March 3, 1995, 7,433 facilities have full accreditation, and an additional 3,095 facilities have provisional accreditation, for a total of 10,528 facilities. I will provide a copy of the accreditation status report for the record.

[The information follows:]

MPRIS Accreditation Report

Counts by Accreditation Body and Accreditation Status as of: 3/3/95

Accreditation Body Accreditation Status: Full

ACR	7,389
SAR	5
SCA	1
SIA	38

Number of Facilities: 7,433

Accreditation Body Accreditation Status: Provisional

ACR	2,673
SAR	34
SCA	386
SIA	2

Number of Facilities: 3,095

Total Number of Accredited Facilities: 10,528

Question. The Mammography Quality Standards Act requires that all certified facilities be inspected annually. How much will each facility be required to pay for its annual inspection? What fee will it be required to pay for a follow-up inspection? What fee will be charged for a recertification inspection?

Answer. FDA has received final clearance for the fees to be assessed for MQSA inspections. We expect to publish a notice in the *Federal Register* the week of March 13, 1996 announcing the fees that will apply to inspections conducted in FY 95. I will provide a chart on these fees for the record.

[The information follows:]

Type of Inspection	Fee
Annual	\$1,178 for the first unit, plus \$152 for each additional unit
Follow-up	\$670 for each follow-up inspection

MQSA does not authorize fees for all inspection activities, rather just those inspection activities under § 354(r) of the Public Health Service Act, 42 U.S.C. 263(r).

Question. If FDA will not complete its development of final mammography standards until the end of FY 1996, what standards will be required of facilities being inspected during fiscal year 1996?

Answer. Until such time as FDA is able to promulgate final mammography standards, the interim standards promulgated on December 21, 1993 will remain in effect. I will provide a copy of the *Federal Register* containing those standards for the record.

[The information follows:]

[CLERK'S NOTE.--The information referred to is available for review in the *Federal Register*, Vol. 58, No. 243, Tuesday, December 21, 1993, pp. 67558-67572.]

IMPORT INSPECTION ENHANCEMENT USER FEES

Question. For fiscal year 1996, FDA is proposing to collect \$15 million in additive user fees to increase the effectiveness and efficiency of its regulatory compliance program for imported products. These fee collections will be used to develop, implement and integrate an enhanced nationwide automated system for processing and monitoring import entries -- the Operational and Administrative System for Import Support (OASIS).

Would you please describe how FDA now regulates the compliance of imported products and how the proposed new automated system proposed to be funded through user fees will enhance this process?

Answer. The Food and Drug Administration enforces the Federal Food, Drug, and Cosmetic (FDC) Act and other laws which are designed to protect consumer health and safety, and to prevent economic fraud. The requirements of the FDC Act and regulations apply equally to domestic and imported products.

FDA determines which products are entitled to admission through the assistance of the United States Customs Service (Customs). Customs is responsible for enforcing the requirement that products offered for entry into the U.S. comply with all entry requirements, including those of other Federal government agencies, such as FDA. Customs notifies FDA of FDA regulated products offered for entry, and FDA determines what action to take regarding the entry. For example, FDA may decide to conduct a wharf examination of the product, sample the product, or permit the product to proceed without FDA examination. If FDA determines that an entry appears violative, it may refuse entry of the article unless it can be brought into compliance with the FDC Act. If the entry cannot be brought into compliance, it must be either reexported or destroyed.

FDA performs a review of 100 percent of the shipments of FDA regulated products offered for entry into the United States. This review is either performed manually through a review of import entry documents or, in those ports where a portion of our Operational and Administrative System for Import Support (OASIS) system has been implemented, through electronic screening.

This review includes the type of product, its country of origin, and its manufacturer/shipper. The review, whether conducted manually or through electronic screening, considers many factors, such as whether the product could have health risk potential; whether the product or its manufacturer/shipper have a history of a high violative rate; whether the product requires pre-approval before distribution (such as drugs and medical

devices) or registration, e.g., low-acid canned foods, radiation emitting devices or medical devices; whether the country of origin may be a source of suspect product, among other factors.

The proposed new automated system, when fully implemented, would enhance this process by rapidly permitting the entry into commerce of low risk and high compliance products and permit FDA to concentrate its limited resources on products with known potential public health risks and a history of previous violation.

The full OASIS System will increase productivity in FDA by supporting import operations through automated interfaces between FDA laboratories, inspection and compliance units, Customhouse Brokers, and other entry filers and U.S. Customs; improving our current ability for the electronic screening of imported products; providing faster turn around time on entries for the importing community through increased use of electronic screening and direct electronic communication capability; allowing for national uniformity; assisting in the tracking and enforcement of suspect products; providing an interface with other FDA systems and data bases necessary for entry review (i.e. to determine approval for drugs and devices); and maintaining a data base for reports and future information.

OASIS

Question. What will be the total cost of developing, implementing and integrating the Operational Administrative System for Import Support? How long will it take to fully implement this system?

Answer. A cost/benefit study, which is currently being conducted by a contractor, will give us very reliable information on the costs for developing, implementing, maintaining and operating the full OASIS system. This study will be completed in June. Our best estimate is that \$15 million per year for the next 5 years will be required for this effort.

If funding is available, we expect to have the core components of OASIS ready to implement nationwide beginning in FY 1996. The full functionality needed for OASIS to operate at optimum effectiveness and efficiency for both the import community and FDA will be completed in a number of modules that will be added to the core system as they are completed in the FY 1998 through 1999 timeframe.

Question. The budget justification indicates that this system will benefit the importer/broker community through faster turn-around times, elimination of paperwork, and reduced costs of doing business. What are

the current turn-around times and how will they be improved by the system proposed?

Answer. In the manual system that all FDA districts were using until the initiation of the pilot of a portion of the OASIS system in FDA's Seattle District in October, 1992, the broker/filer is required to submit to FDA a paper package on each entry (including the FDA - 701 entry notification form, as well as necessary commercial documentation (invoice, Bill of Lading)) and any other necessary forms. Each package was reviewed by an entry reviewer and a decision to "May Proceed," "Examine," or "Detain" the product was made. The results of this decision then had to be forwarded to the broker/filer. The movement of this paper documentation was, generally, through the mail or a courier service. Depending on the work load in the involved FDA district and the mechanism used to transport the paper documentation, this process would take from one (1) to several days.

Currently, in those districts where a portion of the OASIS system has been implemented allowing for the electronic screening of the shipments, the turn-around time has been much improved. The portion of the OASIS system currently on line in 18 FDA port areas and scheduled for nationwide expansion in 1995, permits FDA to electronically screen import entries, based on certain criteria developed by the Agency. As a result of this screening, within minutes of submitting the data electronically, the broker/filer gets one of two electronic messages in return: "May Proceed," if FDA can release the product based on current screening capability or "FDA Review," requiring the submission of the traditional paper documentation for a more in-depth review.

National Statistics for the 18 FDA port areas on the partial system during February 1995 shows that the "May Proceed"/"FDA Review" ratio was approximately 67%/33%. On an average, the system issues its decision within 15 minutes. The electronic screening capability is operative 24 hours a day, 7 days a week.

Full implementation of the OASIS system nationwide will significantly improve the turn around time for entries that are not "May Proceeded" based on the initial electronic screening. It will further reduce the need for the broker/filer to submit a paper package to the agency. When additional electronic data or a paperwork package is requested and evaluated, it will enable the agency to communicate its final decision on the entry electronically to the broker/filer. Most shipments that receive an "FDA Review" message based on initial electronic screening are eventually permitted to enter the U.S. without further FDA examination.

In addition, full implementation of the OASIS system nationwide will permit electronic interface with other FDA data bases that must be accessed during the import entry review process. For example, FDA must confirm that an imported drug has an effective New Drug Approval (NDA) or an Investigational New Drug Approval (INDA), that medical devices are approved and have been properly registered and listed, and that manufacturers of low acid foods in hermetically sealed containers have registered and have accepted process filings, etc. The current partial system that has been implemented in some districts does not permit such access. This interface access will permit a higher level of electronic "May Proceeds."

Question. The budget justification also claims that with the reduction in processing delays brought about by this system, costs to consumers will no longer include increases related to extended storage times. What increased costs are consumers now paying as a result of extended storage times?

Answer. Customs regulations and Section 801 (b) of the FDC Act require that importers post a good and sufficient bond providing for the payment of liquidated damages should an imported product be distributed in U.S. commerce before it is reviewed and released by Customs and other involved government agencies, including FDA. Consequently, importers are required to maintain possession and control of FDA regulated products imported into the U.S. until the product is reviewed and permitted to proceed by FDA. This necessitates that products be controlled and stored by the importer (or the owner or consignee) until the FDA review process is completed.

Any procedures that can improve the turn-around time for review of an imported product will result in cost savings to the importer from reduced demurrage, warehouse costs, interest charges, dock delays, etc. We anticipate that these savings will be passed on to the consumer by the regulated industry.

It is difficult, at this time, to place an estimate on the anticipated savings. However, some information is available based on Customs evaluation of the initial pilot of part of the OASIS system performed in Seattle District. This evaluation was initiated in April of 1993 and does not reflect the current level of electronic screening programmed into the system. The responses to a questionnaire for participants (brokers/filers) in the program shows that 38 of the 61 participating brokers/filers indicated that the system, as configured at that time, did result in monetary savings for themselves or their client from reduced demurrage, interest charges, dock delays, etc. These 38 filers estimated that their savings in this area ranged from

\$3,000 to \$12,000 per year. We must assume that this estimate has increased as additional screening criteria allowing an increased rate of "May Proceed" has been programmed into the system.

In addition, this survey asked brokers/filers to estimate cost savings associated with paperwork reductions. At that time, 23 of the 61 respondents saw calculable savings due to paperwork reduction and estimated that their savings ranged from \$12,000 to \$15,000 per year.

The contractor currently working on the development of the OASIS system, Booz, Allen & Hamilton, Inc., has been asked to do a cost-benefit analysis of the system. FDA will be better able to estimate the potential savings to the importing community, and the consumer, when the cost-benefit analysis is completed.

Question. Will the user fees proposed to be paid by importers be legal under GATT?

Answer. Both our Office of Chief Counsel (formally Office of the General Counsel) and the Office of the U.S. Trade Representative have assured us that the proposed user fees are legal under GATT.

Question. Does the importer/broker community support this user fee proposal?

Answer. Consultations with the National Customs Brokers and Forwarders Associations of America, Inc. indicate that the broker community will support the user fee proposal as long as the fees are devoted exclusively to the automation of FDA's import operations and functions necessary to support the automated system.

Consultations have been held with various importer organizations and support for the system among importers does vary. However, they have indicated a willingness to consider support of the user fees as long as they are assured the fees will go exclusively to the OASIS system and necessary support functions and not to support overall FDA import operations.

REGULATORY REFORM

Question. Efforts are underway in the Congress to reform and streamline federal regulation. What have you done at FDA to identify regulations which are obsolete or create unnecessary burdens on industry?

Answer. In order to meet the goals of this administration concerning regulatory reform, FDA has undertaken a number of efforts to identify regulations

which are obsolete and to reduce unnecessary burdens on industry. Those efforts will be provided for the record.

- In 1991, FDA instituted a systematic review of proposed rules that were not finalized in order to eliminate any regulations that were obsolete and to focus the agency's rulemaking activities. At that time, the agency identified 115 proposed rules that were never finalized. Starting in December 1991, the agency withdrew 89 of these proposed rules, and in January 1993, an additional nine proposals were withdrawn. This review has helped the agency concentrate its attention on higher priority regulations that were mandated by statute or necessary to protect the public health.
- In the Federal Register of June 3, 1994 (59 FR 28821 and 28822, respectively), FDA issued two documents, "Review of General Biologics and Licensing Regulations" and "Review of Regulations for Blood Establishments and Blood Products", that announced that FDA was intending to review certain biologics regulations and requested public comments regarding those regulations. This review is intended to identify regulations that are outdated, burdensome, inefficient, or otherwise unsuitable or unnecessary from a regulatory standpoint and in need of revision to achieve their public health goals more effectively. Under Executive Order 12866, the Paperwork Reduction Act of 1980, and the Regulatory Flexibility Act, FDA is performing a review of these regulations to determine whether they are unnecessary as the result of changed circumstances, duplicative, or inappropriately burdensome. These actions are also intended to update the regulations by incorporating scientific advances in the field, introducing, where appropriate, increased flexibility in the regulations, and further helping to ensure the safety, purity, and potency of biologics products, including blood and blood products. This review is part of FDA's program to periodically review existing significant regulations. The comment periods were extended twice and closed on February 13, 1995. On January 26, 1995, FDA held a public meeting to allow additional opportunity for public comment concerning the agency's review of the general biologics and licensing regulations and regulations applicable to blood establishments and blood products. FDA held the public meeting after considering requests from the Biotechnology Industry Organization and the Pharmaceutical Research and Manufacturers of America for such a meeting.
- In the Federal Register of January 29, 1994, FDA issued a notice announcing a regulations review

program under Executive Order 12866. In this notice FDA listed nine program areas where regulations reviews were already completed, requested public comment on other areas for review, and announced that it intended to perform additional regulations review in the following medical device and veterinary medicine areas:

(1) Hearing Aids: Under existing Federal regulations, hearing aids may be sold only if one of two conditions is met: the prospective purchaser must have received a medical evaluation of hearing performed by a licensed physician or must have signed a waiver that he or she is willing to purchase a hearing aid without such an evaluation, acknowledging that such a course of action is not in his or her best interest. There are studies which have provided evidence that the waiver provision may not have fulfilled the original function envisioned by FDA. Certain States have attempted to modify the waiver provision by promulgating more stringent regulations. However, such State regulations are preempted by section 521 of the Federal Food, Drug, and Cosmetic Act. FDA decided to comprehensively re-address the existing Federal hearing aid regulations. FDA published an ANPRM in the November 10, 1993 Federal Register to request comments and information on all aspects of existing hearing aid regulations, and held a public hearing (also announced in the November 10 Federal Register) on the issues on December 6, 1993. FDA plans to publish a proposed rule to amend the existing regulations in the near future. The proposal will also include revisions to professional and patient labeling for hearing aids.

(2) Medical Devices; Current Good Manufacturing Practices (CGMP): FDA issued final regulations containing Current Good Manufacturing Practice (CGMP) requirements for medical devices in 1978. Except for editorial changes and revisions to the list of critical devices in the preamble of the regulation, these requirements have not been revised since then. On November 28, 1990, the Safe Medical Devices Act of 1990 became law. It amended the Federal Food, Drug, and Cosmetic Act to provide clear authority to add preproduction design validation controls to the device CGMP regulations.

In 1993 in an effort to keep up with current technology, FDA proposed to add design, purchasing, and servicing controls; modify the critical device requirements; revise certain existing requirements to clarify the intent of the requirement; and harmonize the CGMP regulations for medical devices

with specifications for quality systems in international quality standards.

(3) Medical Devices; Recordkeeping and Reporting for Electronic Products: FDA announced its plan to review recordkeeping and reporting for electronic products regulations in 21 CFR Part 1002 in the Federal Register of July 2, 1982. FDA recognized that, although 21 CFR Part 1002 does not appear to have a major impact on the overall radiation emitting electronic products industry, its impact on industry, especially on small manufacturers, should not be overly burdensome and should be determined. FDA convened an internal task force that reviewed the regulations, analyzed public comments, and prepared recommendations for further agency action. As a result of the task force recommendations and comments received, FDA issued a proposed rule in 1990. In this document, FDA proposed that recordkeeping and reporting requirements for some products be reduced or abbreviated and proposed to define more clearly the kinds of information to be maintained and submitted by manufacturers. FDA is now preparing a final rule and expects to have it ready for publication late this year.

(4) New Animal Drug Application (NADA) Procedural Rules and Records and Reports: In 1991, FDA proposed to revise and update the procedural regulations for NADA's to better reflect the requirements for assembly, submission, amendment, review, approval, supplementation, and withdrawal of NADA's. The proposal was based on the Center for Veterinary Medicine's (CVM) intra-center task force review of the current regulations and recommendations for streamlining the NADA review process. Since the proposal was published, CVM has determined that further modifications (including the phased submissions of sections of new animal drug applications) should be proposed before finalizing the regulations. Therefore, CVM is redrafting the proposal and plans to issue a reproposal this fiscal year.

In a companion document to the NADA Rewrite, FDA proposed to revise the records and reports regulations for new animal drugs subject to an approved application (NADA), abbreviated new animal drug application (ANADA), or medicated feed application (MFA). The revision reflects contemporary procedures while avoiding unnecessary burdens on industry and FDA. The Center for Veterinary Medicine is preparing a final rule to implement these proposed changes.

(5) Investigational New Animal Drug Application (INAD) Procedural Rules: The regulations concerning INAD's have not been significantly amended in the 28 years since they were codified. Two years ago, the Center for Veterinary Medicine (CVM) embarked upon a comprehensive review of the existing regulations to compare them to the newly updated human drug investigational regulations as well as to current scientific practices. CVM found that the current INAD regulations do not provide requirements in sufficient detail to instruct individuals involved in the use of investigational drugs for animals (i.e., sponsor, monitors, and investigators) as to their responsibilities in the distribution, use, and disposition of INAD's, and the animals, or edible products thereof, treated with INAD's. The current regulations also lack sufficient detail on the subjects of INAD application requirements, reporting requirements, and the retention of source data. CVM is drafting a proposal to revise the INAD regulations (21 CFR 511) to correct these deficiencies.

- The Nutrition Labeling and Education Act of 1990 (NLEA) amended the Federal Food, Drug, and Cosmetic Act to require food labeling to contain certain nutrition information. The NLEA provided an exemption for small food businesses based upon annual gross sales criteria. This exemption was believed by FDA and industry to be inadequate. In order to reduce the burden on small business, FDA worked closely with Congress and the small business community to amend the law to provide a much broader statutory exemption. FDA published a proposal that reflects the new exemption for low-sales-volume food products that would be available to firms based on the number of people that they employ. As a result, such firms will be able to avoid the expense of nutrient analysis and preparation of new labels for those products.
- In 1994, in an effort to expedite the importation of FDA-regulated goods into the U.S., FDA began a pilot program with the Customs Service to automate the entry process. This is both a cooperative effort with another regulatory agency as well as a customer-service focused initiative where brokers for each importer enter data about shipments into a computer terminal that is connected to the Customs Service system. Each broker receives a message back indicating either that the importation may proceed without FDA intervention or that FDA needs to review the shipments to ensure that the products meet U.S. requirements for safety, efficacy, and labeling, among other things. The Customs Service and FDA both benefit from information sharing and a more

efficient approach to carrying out their respective missions. Importers and related businesses will benefit from expedient movement of goods into commercial distribution.

- As required by the Mammography Quality Standards Act of 1992 (MQSA), FDA has developed interim rules designed to impose the least possible burden on mammography facilities, which are nearly all small entities. The interim rules incorporated existing standards to the maximum extent possible, provided for the issuance of Federal certificates to facilities already accredited by the American College of Radiology, and required facilities to submit certification information directly to the accreditation body rather than to FDA.

The MQSA required the establishment of a Federal certification and inspection program for mammography facilities; regulations and standards for accreditation bodies for mammography facilities; and standards for mammography equipment, personnel, and practices, including quality assurance. These regulations incorporate existing standards, allow flexibility in meeting certain requirements, and enhance the contribution of private non-profit and State accreditation bodies to FDA's "certification" process.

STRATEGIC PLAN

Question. The budget justification indicates that FDA's strategic plan--FDA 2000...Building for the Future--is envisioned as a blueprint for managing the performance of FDA's core programs and renewing FDA's infrastructure to support its mission. It also indicates this plan--which FDA is committed to implementing over the next five years--will guide the reinvention of our regulatory programs in an era of limited resources, increasing requirements, and changing sources of risk.

I have not seen FDA's strategic plan. In fact, I would ask that you submit a copy of that plan to this Committee for its review.

Answer. FDA's Strategic Plan is still in draft form primarily due to the Reinvention of Government initiatives including the reinvention of the regulatory process. We will be happy to provide you a copy of the completed plan as soon as it has been finalized and cleared by the Department.

Question. Could you summarize for us here today what that plan envisions with respect to management of FDA's core programs and reinvention of its regulatory programs?

Answer. We expect the final document to be a clear statement of FDA's vision for the future in line with the Reinvention of Government initiatives.

Question. What does FDA consider its core programs to be?

Answer. The core programs in FDA's strategic plan are pre-market review and post-market assurance. These are designated as core programs because they are the FDA responsibilities that most directly affect the public. Other core areas are designated as the "alliances", e.g., international harmonization, or "infrastructure", e.g. information systems or people, facilities and equipment, needed to support high performance in the core areas.

MEDICAL DEVICE USER FEES

Question. The FDA is requesting a total of \$23,740,000 and 109 FTE to be derived from medical device user fees which will be used to improve the quality and timeliness of its medical device review process.

User fee negotiations with the medical device industry were initiated last year. What is the status of those negotiations and what concerns did industry express over the implementation of such a fee?

Answer. The discussions we had with industry on user fees resulted in the introduction during the 103rd Congress of a bill, Medical Device User Fee Act of 1994, (H.R. 4728). The goal of the bill was to establish an additive user fee program -- i.e., the revenues derived from user fees would be added to FDA's appropriation and dedicated for use in expediting the review of device applications. At a hearing before the House Committee on Energy and Commerce, Subcommittee on Health and the Environment on July 14, 1994, representatives of the two largest device trade associations, the Health Industry Manufacturers Association and the National Electrical Manufacturers Association, testified in support of H.R. 4728. Testimony in support of the bill also was presented by representatives of Medtronic, Johnson & Johnson, the San Diego Biomedical Industry Council and the U.S. Medical Products, Inc. Testimony that was not supportive of the bill was given by a representative of the Utah Biomedical Health Industry Council who opined on the need to reform FDA's standards of review and for Congress to reduce the Agency's regulatory purview. The bill was voted favorably out of the Subcommittee and then out of the Committee on Energy and Commerce on August 9, 1994.

Question. How would average 510k (premarket notification) and PMA (premarket approval application) review times improve if collections were available to the

FDA from a medical device fee, as proposed in the fiscal year 1996 budget?

Answer. Medical device user fees could make it possible to virtually eliminate the existing backlogs in marketing applications and to achieve specific performance goals related to the prompt approval and clearance of safe and effective products. Medical device user fees will improve public health by enabling patients to benefit from more timely access to safe and effective devices used to diagnose, treat, and prevent disease.

Under the performance goals agreed to with H.R. 4728, FDA committed to use the medical device user fee funding to virtually eliminate application backlogs within the first 24 months of the program for 510(k)s, PMAs and PMA supplements and to review and act on device applications within accelerated timeframes. The percentage of 510(k) applications completed within 90 days was to increase from 52 percent in FY 94 to 75 percent in FY 96. The percentage of first review cycles for PMAs completed within 180 days was to increase from 25 percent in FY 94 to 60 percent in FY 96. The proposed user fees also will be used to facilitate expediting the review process through increased guidance to industry; to strengthen the Agency's premarket monitoring and management capabilities to improve risk assessment; and to upgrade automation capabilities and integrate program information systems.

MEDICAL DEVICE REVIEWS

Question. The fiscal year 1996 budget justification indicates that the Agency has taken many steps over the last two years to improve its review of device applications. It indicates that FDA added significant resources to the premarket notification (510(k)) and premarket approval application (PMA) programs in fiscal years 1994 and 1995 which allowed the Agency to increase the number of outputs and reduce the number of pending applications.

Would you please identify the additional resources, both in terms of dollars and staff years, which were added to the 510(k) and PMA programs in each of fiscal years 1994 and 1995, and from which other FDA programs they were taken.

Answer. In FY 1994 Congress appropriated an additional \$20 million and 99 FTE to implement provisions of the Safe Medical Devices Act of 1990 and to improve the medical device product review process.

FDA applied the additional resources to the review of 510(k), PMA, and PMA supplement applications. In FY 94, 510(k) review resources increased by 46 FTEs while

PMA review resources increased by 21 FTEs. Both of these review programs received additional resources this fiscal year. FDA estimates that in FY 95 it will use 14 more FTEs in the 510(k) program, 9 more FTEs in the PMA program, 2 more FTEs in the PMA supplement program, and 4 more FTEs in the IDE/IDE supplement program. FDA used some of the additional operating funds to improve the processing of product review applications. Additional funds were allocated towards private contracts for product review document control, advisory panel meetings, committee management, and document scanning; and for the purchase of ADP equipment for the product review staff.

Question. FDA indicates that its backlog of 510(k)s has decreased. Is it because the FDA has simply sent back hundreds of 510(k)s which were improperly prepared? Of the 75% reduction in 510(k)s claimed, from 1,894 active and overdue at the end of December 1994, how many were sent back because they were improperly prepared?

Answer. According to CDRH's product review data, the 75% decrease in 510(k) backlog occurred from September 1993 to September 1994. As of September 30, 1993 the number of 510(k)s under review more than 90 days reached 1,875. Of these overdue applications, 79% reached a final completion by September 30, 1994. I will provide information on the status of the 1,875 overdue applications for the record.

[The informatin follows:]

Status of Overdue 510(k) Applications- One Year Later

1,123 (60%) - found to be substantially equivalent (SE)

53 (3%) - found to be not substantially equivalent (NSE)

309 (16%) - Other*

164 (9%) - under review

226 (12%) - on hold** (Of these, 25% were on hold more than once)

* Includes withdrawn by submitter, deleted due to lack of response, a duplicate, not a device, a transitional device, regulated by CBER, a general purpose article, exempted by regulation, and other miscellaneous actions.

** Pending receipt of additional information from the submitter.

Question. I note that the Agency performance goals for fiscal year 1995 are to achieve an average review time for 510(k)s of 190 days and 400 days for PMAs. The justification indicates that this is FDA days only. What is meant by FDA days only?

Answer. Average FDA review time for premarket notification [510(k)] submissions includes all increments of time FDA reviewed a 510(k) application as long as the 510(k) document number did not change, which occurs rarely. This excludes time while a submission is on hold pending receipt of additional information from the submitter.

Average FDA review time for premarket approval applications (PMAs) is calculated according to the requirements of the Premarket Approval of Medical Devices Regulation (21 CFR Part 814) where the review clock is reset to zero upon FDA's receipt of a "major amendment" to the application or a response to an FDA "refuse to file" letter. Thus, the calculation of average review time excludes all FDA review time that occurred prior to the latest resetting of the clock. The review clock may also be stopped and resumed, but not reset, for approvable letters. An approvable letter is issued when the application is determined to be acceptable with minor deficiencies remaining to be resolved and/or pending an outcome of a GMP inspection. The issuance of filing and minor deficiency letters by FDA have no effect on the review clock.

Question. Also, how do these performance goals compare to the average review times for 510(k)s and PMAs in fiscal year 1994?

Answer. The FY 95 average review time estimates are about 3% and 7% higher, respectively, for 510(k)s and PMAs than the FY 94 averages. In FY 94, the average FDA review time for 510(k)s was 184 days, and the average FDA review time for PMAs was 374 days.

Question. How do they compare to the average review time for 510(k)s and PMAs in 1989?

Answer. The FY 95 average review time estimates are about 2.9 times higher than the FY 89 averages for both application types. In FY 89, the average FDA review time for 510(k)s was 66 days, and the average FDA review time for PMAs was 145 days. These increases are a result of changes that FDA has made in the device review process. In May 1993, the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, issued a report on FDA's device review process. The report recommended a number of changes to address problems found during the Subcommittee investigation. FDA has incorporated these changes which have resulted in

more complex submissions using better science to ensure that safe and effective devices are approved for marketing.

Question. I'm told that figures supplied to industry by the Office of Device Evaluation since 1989 indicate that device applications are decreasing while the times for reviews are increasing. Is this accurate?

Answer. It is accurate that the average FDA review times for 510(k) submissions increased from FY 89 (66 days) through FY 94 (184 days) and that the number of applications decreased from 7,022 to 6,434. However, the number of receipts varied from year to year, increasing from 5,831 in FY 90 to 6,509 in FY 92.

The average FDA review times for PMA applications varied from 145 days in FY 89 to 374 days in FY 94. However, not every fiscal year showed an increase when compared to its previous fiscal year. For example, FY 91 (199 days) was lower than FY 90 (228 days), and FY 92 (146 days) was lower than FY 91 (199 days). The number of PMA applications consistently decreased from FY 89 (84 applications) through FY 93 (40 applications). In FY 94, there was a slight increase in the number of applications (43).

Question. How do FDA's current average review times for 510(k)s and PMAs compare with the review times for products in Europe?

Answer. We do not have information on review times for products approved in Europe. It is important to point out, however, that until this year, many countries in the EU generally required no systematic review of devices as a condition for marketing. Even today, the program in Europe is only partially in effect. The relative infancy of the European system makes it difficult to gauge its effectiveness, either in public health terms or in the degree of access to new products and, furthermore, to draw any meaningful comparisons with the U.S. regulatory system.

MEDICAL DEVICE PRIORITIES

Question. It appears that a significant portion of the activities relevant to premarket approvals and notification involve manufacturing process changes, changes in manufacturing locations, changes in materials suppliers, and labeling changes. Would it not be more efficient to permit the manufacturer to make such changes, validate them, and then be subject to inspection rather than requiring prior approval in Washington? If not, why not in each instance?

Answer. FDA recognizes that the criteria are not well defined for deciding whether a given device modification requires a new 510(k) submission. Agency efforts culminated in the development of a "straw" proposal that was the object of considerable public discussion in 1994. Based on these discussions, the agency has developed a better understanding of the complexity of the issue and the perspectives of all segments of the device industry. FDA is nearing completion of a revised guidance document for public review. The new guidance will propose a simplified decision-making process presented in flow-chart format that clearly reflects the agency's views but, more importantly, shifts the responsibility for making decisions about the necessity for new 510(k)s from FDA to the industry, thereby eliminating a large number of submissions and avoid delaying products from reaching the market.

CDRH RESEARCH

Question. The mission of the Center for Devices and Radiological Health (CDRH) is to be the gateway for new products entering the market and for continuing surveillance as long as they are in commercial distribution.

Why does CDRH spend millions of dollars on research?

Answer. CDRH laboratories are a necessary and vital component of the Agency's scientific and regulatory programs. They provide scientific expertise and initiate projects for important Centerwide programs such as premarket review, postmarket surveillance, and enforcement. The CDRH laboratories develop the test methods necessary to assess mandatory and voluntary standard compliance. In many cases, the work done at CDRH labs are applicable to a variety of devices manufactured by more than one company. In most instances, there are no industry or academic laboratories that are willing to undertake these projects.

The laboratories discover and address public health problems before they become acute and conduct specialized regulatory sample analyses to assure compliance of products where no accepted or appropriate test method is available. For example, FDA has conducted research to determine how the electromagnetic environment interferes with performance of various devices, such as apnea monitors, powered wheelchairs, cellular telephones, and pacemakers. Without these laboratories, FDA's sound and independent scientific basis for many regulatory decisions could be seriously diminished. A lack of internal laboratory expertise could increase dependence on industry sources of information in a way that would reduce and possibly eliminate the availability of

information necessary to assess and remedy public health problems. CDRH laboratories also provide an independent source of data so that the Agency does not have to rely entirely on manufacturer submissions to obtain the necessary scientific information.

In FY 94, CDRH expended approximately 167 FTEs and \$14.6 million for medical device and radiological products research-related risk assessment activities. Most of the expenditures for these activities were payroll costs of \$11 million. CDRH also expended approximately \$2.6 million in operating expenses for the following activities: international standards development and coordination; domestic voluntary and mandatory standards development; radiation physics; risk assessment; test method development and support; and laboratory evaluation of products. CDRH also expended \$1 million for extramural research activities.

A small portion of the 167 FTEs (approximately 18) were used to conduct direct review of premarket submissions in response to special review needs within the Center. Eight of its FY 94 FTEs were devoted towards direct standards enforcement support in CDRH's calibration facilities. Operating funds in the amount of \$225,000 were used to support radiological health standards activities, most of which is funneled back to the States supplies and equipment used in local radiological health programs.

CDRH GRANTS AND CONTRACTS

Question. How much was spent on grants, contracts and interagency research agreements in FY 94?

Answer. In FY 94, CDRH spent a total of \$954,919 on extramural research projects. These included \$751,519 in contract costs and \$194,400 for interagency agreements. CDRH did not spend any money on grants during FY 94. CDRH expects to spend even less money for these activities in FY 95. As of March 6, 1995, CDRH has planned to spend \$198,967 for contracts and \$86,000 for interagency agreements for a total of \$284,967.

Question. How much will CDRH spend in FY 95?

Answer. CDRH is not planning to spend any money on grants in FY 95.

OFFICE OF SCIENCE AND TECHNOLOGY

Question. Does CDRH also conduct such research internally at the Office of Science and Technology?

Answer. CDRH maintains an intramural science program within its Office of Science and Technology (OST)

to assist the Center in meeting its public health mission. OST has 21 laboratory program areas which cover key scientific disciplines such as engineering, physical science, and biology. The areas involve specific laboratory activities that are directed at: (1) evaluating products; (2) developing and validating test methods and measurement techniques; (3) assessing risks and conducting hazard analyses; and (4) developing generic techniques to enhance product safety and effectiveness.

OST evaluates all the projects in the 21 program areas on an annual basis to ensure that its laboratory resources are directed to the Center's most important regulatory needs. The planning process involves collaboration with all Center line offices to ensure that the projects have a direct relevance to CDRH's premarket and postmarket needs.

CDRH RESEARCH PROJECTS

Question. Please provide the Committee with details of all research projects external and internal funded in each of fiscal years 1994 and 1995, as well as those planned for fiscal year 1996, identifying the purpose of each grant, contract and interagency agreement and the cost of each.

Answer. I will provide for the record information on CDRH's external and internal research projects for fiscal years 1994, 1995, and 1996.

[The information follows:]

CDRH Intramural Research Activities

Total FY 94 Resource Expenditures: 167 FTEs
\$2.6 million (non-salary)

Total FY 1995/1996 Resource Expenditures: Similar to FY 1994 levels

Involves Six Major Activity Areas:

- international standards development
- domestic/voluntary mandatory standards
- radiation physics
- risk assessment
- test method development and support
- laboratory evaluation of products

Covers 21 Laboratory Program Areas: Areas are ongoing; the projects vary from year to year

CDRH Intramural Research Activities

Program Name	Program Goal
Device Mechanical Performance Analysis	Develop analytical and experimental methodologies for quantifying mechanical, structural, and durability requirements and performance of various medical devices and their components.
Biomaterial Characterization	Develop consistent analytical methods and baseline data for the chemical, physical, and mechanical properties and characteristics of biomaterials.
Processing Effects on Biomaterials Properties	Identify and quantify critical effects of fabrication processes on the performance characteristics of biomaterial based devices.
Prediction of Materials Biostability	Develop predictive, laboratory-based methods for determining long-term stability of biomaterial-based devices and identifying and quantifying degradation by-products.
Service Induced Biomaterial/Device Degradation	Determine the clinical modes of biomaterial/device degradation and identify critical parameters of the service environment which are responsible for such degradation.
System/Software Safety and Reliability	Analyze software safety issues to drive premarket and postmarket regulatory decisions; advance medical device software development practices; and develop appropriate software development standards for assuring the safety and effectiveness of computer-controlled medical devices.
Ionizing Radiation Metrology	Calibrate the instruments used in verifying conformance with x-ray performance standards and provide x-ray beams with known endpoint voltages for calibrating kVp meters; establish a new calibration facility for x-ray reference radiation beams similar to those found at mammographic facilities.
Intelligent Medical Device Evaluation	Develop the ability to test the effectiveness of smart medical devices without resorting to the use of comprehensive clinical trials.

Program Name	Program Goal
Engineering Quality Assurance	Identify broad technical areas where problems with engineering quality assurance are most likely to occur and apply appropriate remedies to correct the problems.
Diagnostic Imaging	Identify, quantify, and apply measures of imaging and physical performance to the evaluation and improvement of medical imaging products.
Medical Device Materials Toxicology	Increase understanding of how the body interacts with and reacts to medical device materials, and improve the specificity and sensitivity of preclinical toxicity tests.
Interaction of Medical Devices with the Immune System	Increase understanding of the nature and mechanism of biological effects that result from modulation of the immune system by implanted and extracorporeal medical devices, and assist in the development of CDRH guidance criteria for scientifically valid premarket applications that involve potential interactions with the immune system.
Infection Control	Develop tests to evaluate the ability of barrier materials to prevent the transmission of infectious agents, including viruses and methods to assess the adequacy of sterility and disinfection methods to eliminate infectious agents; incorporate tests and methods into premarket guidance documents and in domestic and international standards.
In Vitro Diagnostics	Insure the reliability and effectiveness of in vitro immunological and molecular diagnostic devices and develop in vitro test methods to enhance the reliability of predicting the mutagenic potential of biomaterials.
Radiation Biology Research	Conduct electromagnetic field (EMF) research to determine hazardous levels of emissions from electronic products which will enable CDRH to promulgate emission standards where needed; develop risk-benefit analyses for FDA-approved, ultraviolet radiation-emitting dermatology devices and risk analyses for commonly used sunlamps.
Electrical Stimulation of Medical Devices	Develop new engineering performance test methods to assess the safety and effectiveness of cardiac stimulation devices; develop new laboratory performance test methods and review guidance documents for neural and neuromuscular stimulation devices.
Electromagnetic Compatibility (EMC) of Medical Devices	Evaluate problem reports to identify medical device failures that may be caused by exposure to electromagnetic fields and MRI emissions; develop new EMC test methods for use in reviewer guidance documents and in domestic and international voluntary standards; perform in-house testing on EMC on the most problematic devices.
Fluid Mechanics	Characterize cardiovascular implant performance for input into regulatory guidance and for validation of manufacturer protocols and data; establish correlations between performance testing and clinical complications.
Ultrasonics	Develop accurate measurement techniques and standardized measurement procedures for medical ultrasound fields; develop a reproducible computational technique to determine the conditions that provide optimal image quality while minimizing patient exposure; evaluate current test methods and develop a quantitative sensitivity test for Doppler ultrasound devices; develop regulatory guidance and voluntary standards.
Lasers	Determine equivalence parameters for ablative lasers and evaluate performance and risks from laser surgical devices; determine parameters for photoablation of corneal and cardiovascular tissues to increase risk understanding which will strengthen CDRH's review capabilities of UV-Excimer and other ablation lasers.
Optics	Develop and evaluate test methods for optical medical devices for use in premarket review guidelines and international standards; determine the optical characteristics and performance of multifocal IOLs, falloscopes, and endoscopes.

Question. Why not rely on industry which is developing products to do this work?

Answer. CDRH laboratories undertake research in areas where industry laboratories either cannot or will not do the needed research. Examples include work on ultrasonic assessment of heart valves, absorbable suture retained strength, night vision glasses emissions, barrier products test methods, leachable TDA (Toluene Diamine) from polyurethane coated breast implants, tampon absorbency, electromagnetic interference (EMI) test methods, medical image assessment, and orthopedic implant strength.

In other instances, it is inappropriate for industry to do the research. For example, in the analysis of potential compliance issues where speed of response and confidentiality are of primary concern, CDRH laboratories have conducted research on ventilator fires, heated wire breathing circuit failures, intraocular lens (IOL) image quality, and spinal anesthesia catheters.

Where enforcement of mandatory standards is at issue, CDRH laboratory activities may have to stand up to judicial review as in the case of radiation measurement and calibration activities and in test method development for mandatory radiological and medical device standards.

CDRH laboratories provide an independent source of data so that the Agency does not have to rely entirely on manufacturers' submissions. This independent source of data has been beneficial for IOL visual quality, ethylene oxide residues in devices, medical imaging follow-up of problematic devices, factors affecting the quality of *in vitro* devices, and leachable TDA from polyurethane foam coated breast implants.

MEDICAL DEVICE INSPECTIONS

Question. What do you think of the European system of inspections which is aimed at assisting manufacturers to come into compliance with standards rather than penalizing them?

Answer. FDA routinely provides manufacturers with the opportunity to correct cited deficiencies voluntarily. Only when the deficiencies (violations) are of such significance as to present a serious health hazard, or if there is evidence of fraud would FDA go directly to regulatory action such as injunction or prosecution.

During the issuance of an FDA-483 (List of Observations), each item listed is discussed in detail with the establishment's responsible management, in an attempt to assure that our (FDA's) concerns are

understood. Establishments are made aware that correction of these deficiencies is expected in a timely manner. Any responsible management which is not on-site is provided with a copy of the FDA-483 after the inspection.

Both domestically and internationally, FDA has been very active in providing and participating in workshops covering the FDA requirements, such as Good Manufacturing Practice regulations (GMP) and pre-approval procedures. We have membership on various international standards committees as well as international harmonization committees, the goals of which are to standardize regulatory activities worldwide.

Question. How many device manufacturing facilities in the U.S. are inspected each year?

Answer. On average over 1600 device manufacturing facilities have been inspected annually over the last three (3) years.

Question. How often is each facility inspected?

Answer. Device manufacturers are currently being inspected about every 5 years.

Question. What percentage of inspections result in issuance of FDA-483 warnings?

Answer. FDA-483s are issued in about 53 percent of the inspections conducted of device manufacturing facilities.

MEDICAL DEVICE REFERENCE LIST

Question. If an FDA-483 is issued, does the manufacture in question go on to a reference list and what are the ramifications of being on such reference list?

Answer. The issuance of an FDA-483 does not indicate a firm will be automatically placed on the Medical Device Reference List. A firm is only placed on the Reference List when the most recent FDA inspection of the firm revealed deviations from device Good Manufacturing Practices (GMP) which resulted in a classification of Official Action Indicated (OAI) and a Warning Letter issued or other enforcement action initiated. A firm is taken off the Reference List when the district and/or headquarters determines that the firm has made adequate correction to their GMPs. The Reference List is only referred to for two programs - the 510(k) Notification Program, and the Certificates for Products for Export Program.

When the CDRH Office of Device Evaluation (ODE) completes the technical review of the Class I or II 510(k), the application is checked against the Reference List to determine whether the firms involved are in or out of compliance with GMPs. If there is a match between the application and a firm on the Reference List, the application is referred to the Office of Compliance (OC) for further compliance review.

Ordinarily, if the relevant firm or firms are found out of GMP compliance and the GMP deviations are relevant to the device application, a "recommend postpone" notice is sent to ODE. The district office advises OC as soon as the firm has made adequate corrections, and OC sends a "recommend proceed" notice to ODE. The SE Letter is subsequently issued by ODE.

The Reference List also is checked when firms request Certificates for Products for Export from FDA. Importing countries require this certification before they will allow device products to be imported. The document certifies that at the time of inspection, the firm was in compliance with all applicable regulations. If the firm is on the Reference List and the GMP deviations are relevant to the device identified for export, the certification is not issued until corrections are made. The district office is contacted and, as soon the firm has corrected its GMP deviations, the district office advises the Center that it may release the Certification.

MEDICAL DEVICE INSPECTORS

Question. How are inspectors of device facilities trained?

Answer. All FDA Investigators are college educated, with at least 30 semester hours of science; most have a bachelor's degree or higher. They then receive 6 months of training as described in the Investigator's Training Manual. They all attend the Basic Law and Evidence Development course and a basic course in Interviewing. Investigators are also provided basic training in several program areas: Biologics, Medical Devices, Drugs, and Foods, through both courses and on-the-job training. The courses are given nationally or regionally and each district decides which Investigators to send, based on the inventory of firms to be inspected and on the training of persons already on staff. Traditionally, investigators have been given some training, courses and on-the-job, in all program areas, with emphasis on conducting an inspection. Later courses and work are given to help develop an investigator's expertise in a specific program area, such as software used in devices.

Question. Do they specialize in devices or must each inspector inspect drug companies, device companies, biologic companies, cosmetic companies, etc.?

Answer. In the last few years, most districts have targeted training for new hires in areas of specialization. These investigators receive intensive training, both on-the-job as well as through national and regional training courses, in their program of specialization. They are then assigned work in that program only. Investigators who have been with the agency for more than 5 years, who work in districts with a wide variety of industries, or who work in 1 to 2 person resident posts, routinely inspect within more than one industry and have training commensurate with these duties (i.e., experiential as well as national and regional training courses). Most investigators have some degree of specialization and tend to do more work in that area.

Most districts are now developing program teams whose members devote most of their inspectional time to the identified program. The team members consist of both district office and resident post personnel.

When a district feels they need technical expertise for a particular inspection, they can obtain that help through the FDA scientific and technical experts based in the Centers or from National Expert investigators who have an exceptional degree of specialized expertise.

Question. Would the system be more efficient if such specialization occurred?

Answer. In districts with a large amount of one industry, specialization is easily obtained and leads to increased efficiency. In districts with a wide variety of industries, specialization is more difficult to obtain. For example, if the district had to assign work by specialty only, they might have difficulty finding enough work for a drug specialist for an entire year. In these districts, the most efficient use of the people resources would be to have Investigators cover more than one program area. In very large districts, such as the Dallas District, which covers Texas, Oklahoma, and Arkansas, industry is spread out. The amount of work in Tulsa, for example, is enough to keep one resident busy, but the industry is varied. If a specialist was needed for each inspection, the district would spend a great deal of money traveling, for example, a device specialist to Tulsa to conduct three to five inspections per year. This may be more efficient for both the investigator and the firm, but it would be costly for the FDA and the public and could complicate the scheduling of inspections. In summary, we believe the current system works well to serve the needs of the public and regulated

industry within the available personnel ceilings and travel funds.

THIRD PARTIES

Question. What do you think of the European Community (EC) system which involves private "notified bodies" in the device regulatory system?

Answer. It is premature to draw any conclusions about the effectiveness of the European system, either in public health terms or in the degree of access to new products.

There is a notable difference between the European Union (EU), formerly the European Community or EC, and that employed in the United States. The European system is a "safety only" system and, therefore, does not consider the clinical effectiveness of newly-developed medical devices. That is to say, the EU system does not require premarket evaluations of devices to be done in a risk-benefit context, which could be viewed as inextricably tied to safety. For example, the benefits of a life-saving device where there are no other treatment options could justify its marketing, whereas if the benefits are not medically significant or safer alternatives exist, the tolerance of risk would be lower.

A possible downside to the European system is that it may promote "forum shopping" -- that is, manufacturers seeking out the "notified body" from which they believe they will have the best chance of obtaining market clearance.

Question. Could this be done here to lighten the load of the FDA staff?

Answer. The Agency does not know if this approach would work in the United States.

Question. What if manufacturers wishing to employ such private parties paid for their services?

Answer. We do not know if this would work in the United States.

Question. Does it trouble you that hundreds of medical devices are available overseas which are not available here?

Answer. Until the recent inception of the EU system, devices were only marginally regulated or not regulated at all in many foreign countries. Manufacturers wishing to commercialize their products could introduce them into the marketplace without meeting any substantive requirements. Because regulatory

oversight was limited, we do not have reliable information about the market performance of devices nor the risks they may have posed to patients. We are aware of instances where devices--for example, the Shiley 70 degree heart valve--were allowed on the market in Europe but were prohibited by the U.S. This valve later proved to be intrinsically flawed and was responsible for a number of patient deaths.

Question. Does it trouble you that many of the leading U.S. device manufacturers are moving their facilities off-shore because of our regulatory system?

Answer. We have not seen credible evidence that the U.S. regulatory climate is the sole or even the primary reason for off-shore relocations of manufacturing operations and clinical research.

A recent survey by the Health Industry Manufacturers Association shows that U.S. device manufacturers are capitalizing on an expanding world market, particularly for "high tech" products. Survey figures show that the overseas market now accounts for 60% of world-wide sales, compared to 40% in 1980. Besides the desire to expand international market shares, the survey shows that American businesses have moved off-shore for a variety of reasons including higher liability risks in the U.S. and constraints on Federal reimbursement, in addition to the domestic regulatory climate.

The factors affecting decisions by American manufacturers to relocate their businesses overseas were also cited in a May 1992 Congressional Research Service report. The report indicated that lower labor costs, lower tariffs, lower transportation and construction costs, greater ease in penetrating foreign markets and tax incentives influence decisions to move operations outside the U.S. To attribute the off-shore moves of a single industry to domestic regulatory burdens without good evidence is simplistic.

SEAFOOD SAFETY

Question. Would you please describe the current status of FDA's seafood safety efforts and what additional plans you have in this area.

Answer. FDA operates a comprehensive seafood safety program under the authorities of the Federal Food, Drug, and Cosmetic Act (FD&CA) and the Public Health Service Act. FDA's program includes mandatory, unannounced inspections of the domestic industry and examinations of imports that are offered for entry into the United States. It also includes a research component in support of the agency's regulatory mission, public education programs, including a toll-free "Seafood Hotline" that

has dispensed information to thousands of people nationwide, and Federal-State cooperative programs that involve training, technical assistance, and information sharing, among other things.

The most significant additional plans that FDA has regarding the seafood program involves putting into effect state-of-the-art food safety control principles known as Hazard Analysis, Critical Control Point (HACCP). Major components of the seafood industry have urged FDA to take this step. Many of the U.S.'s trading partners, especially those in the developed world, are opting for HACCP-type systems for seafood and requiring it of countries with which they trade. A HACCP system in the U.S. will provide U.S. consumers with the most efficient and effective safety control system developed to date, and will solidify the status of U.S. seafood exports in the world market. Another significant initiative of the FDA is the development of international agreement with trading partners based on the existence of HACCP-type systems in other countries.

MEDWATCH

Question. How effective has FDA's Medwatch program been in monitoring adverse reactions to drugs and product performance problems?

Answer. MEDWATCH, launched in June 1993, is a promotional initiative designed to educate health professionals about drug- and device-induced disease and the critical role that all health professionals play in the postmarketing surveillance of marketed medical products. MEDWATCH is also an endeavor to change the very culture of medicine so that health professionals instinctively think to report serious adverse events and product problems to the FDA either directly or via the manufacturer.

The objective of MEDWATCH is not necessarily to increase the number of reports coming into the FDA but rather to educate health professionals as to the type of reports that should be reported thereby increasing the proportion of reports that are serious. Limiting reporting to serious events will enable the Agency to focus limited resources on those events with potentially the most public health impact.

MEDWATCH did not change the existing monitoring/post marketing surveillance programs in place within the individual FDA Centers. The responsibility for evaluating submitted reports--both those sent directly to the Agency and those submitted via the manufacturer--and taking any appropriate regulatory action still lie with the individual programs.

What MEDWATCH did change was how health professionals can report directly to the Agency, if they choose to do so. One form, the postage-paid MEDWATCH voluntary form, is now used to report on ANY FDA regulated medical product, as opposed to five different forms previously used to report, dependent on type of product. Health professionals may also report by calling a toll-free number. Two other toll-free numbers are available to report by computer modem or to fax a report. The onus is upon the agency--the MEDWATCH Central Triage Unit - CTU--to send the reports on to the appropriate monitoring/surveillance program within the Agency. This consolidation of promotion, receipt and initial processing of voluntary forms has reduced duplication of effort and individual postmarketing surveillance program costs.

From June 1993 through February 24, 1995, the MEDWATCH Central Triage Unit has processed over 24,258 voluntary reports. The majority were received by mail (79%) followed by fax (19%). About 1% of reports were phoned in and less than 1% were reported via the computer modem option.

Of these 24,258 voluntary reports, 70% were on an adverse drug event and another 9% were about a product problem with a drug--no patient involved. About 2% were on an adverse event with a biologic product. Eighteen percent of the reports were on a medical device. Less than 1% were reports about special nutritional products.

The MEDWATCH educational message is to report serious events. The effectiveness of such a new program is difficult to assess, however, initial data indicates that the new form is very well accepted, the volume of reporting has increased as has the quality of the reports and most importantly, the proportion of reports that are on serious events has actually increased for some programs.

Focusing on voluntary adverse drug event reports pre- and post-MEDWATCH, the proportion of reports involving a patient outcome of death, hospitalization or disability by year are: 1991 (31%), 1992 (34%), 1993 (45%) and 1994 (49%). One study, in press, designed to evaluate the quality of adverse drug event reports sent directly to the FDA from voluntary reporters pre- and post-MedWatch found an overall increase in reporting of serious events and those associated with newer drugs. Pharmacist reports increased both in number and in quality. Physician reports were noted to be high quality in both year's samples, although the absolute number of reports received decreased from 1993 to 1994. Based on this data, FDA is reevaluating certain aspects of the MEDWATCH form along with developing continuing education efforts particularly geared to physicians.

Health professionals may also report adverse events and product problems to FDA via the manufacturer. In fact, the majority of reports submitted to the FDA are reports from those companies/institutions subject to mandatory reporting under federal regulation. These reports are sent to FDA on the mandatory version of the MEDWATCH form, which is virtually identical to the voluntary version on the front while the back contains questions specific to mandatory reporting. Having one form available for mandatory reporting has made it easier for those companies making multiple types of medical products. Prior to MEDWATCH, companies were faced with the possibility of having to use one form to report on drugs, one for biologics and another for medical devices. The mandatory MEDWATCH form is sent directly to the appropriate Center and is not processed by the MEDWATCH CTU.

The individual postmarketing surveillance programs within the FDA, i.e., drugs, biologics, medical devices and special nutritional products, use these reports, both those sent directly to Agency and those submitted via the manufacturer, to signal potential problems and trends that might require further investigation and regulatory action, e.g., labelling changes, "Dear Health Professional" letters, Public Health Advisories, Safety Alerts, or product withdrawals. It is very difficult to assess the impact that MEDWATCH has had so far on the discovery of new safety information. It is important to note that MEDWATCH, per se, is an effort by the FDA to change the culture of medicine, i.e. to make voluntary reporting a part of every health practitioner's professional responsibility, and it will take time to fully evaluate how effective the program has been.

Question. What is the current level of funding and staffing for FDA's MedWatch program? What resources are included in the FY 1996 request for MedWatch?

Answer. Funds and staffing directly related to the MEDWATCH educational/promotional initiative and not existing prior to MEDWATCH are as follows:

- MEDWATCH program in the Office of the Commissioner
 - 3 FTEs
 - \$175,000 for FY95 with same requested for FY96
- MEDWATCH Central Triage Unit (maintained as one component of a major Center for Drug Evaluation and Research contract that runs through May 1998)
 - approximately \$194,000 per year

ANIMAL DRUG APPROVALS

Question. In the February 1995 issue of Progressive Farmer Magazine, an article on animal drugs indicates that the FDA has only approved 6 totally new drugs for all animal species in the past five years. In that same period, at least ten important drugs for the poultry industry have had their approvals removed by the FDA. Some of these drugs are readily available overseas. I understand that the FDA's statistics for animal drug approvals are higher due to the inclusion of actions such as label and dosage changes, and new formulations.

Why has FDA acted on so few new animal drugs when research and development for animal drugs has more than doubled during the past decade?

Answer. FDA is making notable progress toward improved efficiency of its animal drug review and approval processes. Specifically, over the last several years and as currently supported by new leadership, FDA's Center for Veterinary Medicine (CVM) has made significant changes in its approval processes. The commitment to improve is reflected in CVM-wide strategic planning, and is being pursued concurrently with Administration goals for streamlining and reducing the size of Government.

While CVM has not achieved the levels of performance it would like in terms of improved processing of NADAs, it is important to note that the Agency is performing at levels well above those represented in the trade press and elsewhere. For instance, the figures attributed to Progressive Farmer Magazine are not familiar to FDA, and it is not clear where the figures came from, but we believe they are simply incorrect. There are many ways to assess the significance of NADA approvals, but even by the most conservative standard, the one apparently adopted by the Progressive Farmer Magazine,--i.e., only counting the initial approval of a chemical entity for animal use as significant,--the number should be 15 in the past 5 years, not 6. Counting the first approval of a chemical entity for a new animal species as also significant--which we think it is--would essentially double this figure over the same period.

It is not clear how the figure of 10 important poultry drugs withdrawn was derived, but an agency-initiated NADA withdrawal involves an exceedingly onerous administrative process--one not engaged in lightly. Most withdrawals of poultry drugs over this time period were based on concern over the carcinogenicity or other toxic effects to humans of drug residues in birds going to slaughter. Five chemical entities--ipronidazole, dimetridazole, dibutyltin dialaurate, nitrofurazone, and furazolidone--marketed as at least ten approved poultry drug products were

withdrawn by their sponsors because the Agency determined they were carcinogens or probable carcinogens. Additionally, an interim policy was withdrawn under which another chemical, gentian violet, was allowed as an additive to inhibit mold in poultry feed for the same reason.

Also, during the past few years, the Drug Efficacy Study Implementation (DESI) program, which finalized the efficacy findings of the National Academy of Sciences/National Research Council (NAS/NRC) as product approvals, removed claims from some products approved between 1938 and 1962 to require all marketed drugs which were approved on the basis of safety to be evaluated for effectiveness. DESI finalization of unapproved, interim-marketed products was necessary to allow approval of generic copies under the provisions of the Generic Animal Drug and Patent Term Restoration Act of 1988. Thus, the net effect of DESI finalization has been loss of label claims for certain livestock species on approved products.

With respect to comparisons of "amount of research" over time versus "numbers of significant NADA approvals" over the same time, one must be careful what one is actually comparing. For example, if cost of research is used to assess "amount", simple inflation will cause an apparent increase over time. Even if there is a true increase in "amount of research"--although it is not clear how that would be measured--, it would almost certainly represent total research. Not all research conducted by pharmaceutical firms is intended to support NADA approval, many studies are conducted to support promotion of superiority of products relative to competitors, i.e., to support advertising. Even if this kind of research were eliminated from the comparison, much research is directed toward sponsor initiated changes in label, dosage or formulation which, in the opinion of some sources, cannot be counted as significant approval actions. If this were true, then research to support such changes should similarly not be counted as significant.

In the final analysis, even if one were comparing investment to return on an equal basis, there would always be a lag between outlay and return, even if there were no review of data by the FDA. When one composites all of these variable lag-phases across the industry, the situation could look either very bad or pretty good depending upon the particular point in time and over what period of time preceding that point one chose to review.

Question. It is my understanding that FDA is required by law to act on animal drug approval applications within six months. However, FDA reportedly

is taking three years, on average, to approve such applications. Why the delay, Dr. Kessler?

Answer. The statute generally provides that FDA shall within 180 days of the filing of an NADA approve the application or give the sponsor of the NADA a notice of opportunity of hearing on whether the application should be denied. When FDA files the application, the 180 day clock begins. However, the reason that the application is not approved in 180 consecutive days is that in most cases, submissions in the application may be unacceptable to FDA because of the need for additional research or information. FDA is not able to approve the application in that case so instead of proposing to deny the application, the Agency works with the sponsor to get the necessary information by notifying the sponsor of the deficiencies in the NADA. The 180 day clock stops when FDA requests further information. When the sponsor submits the requested information, the 180 day clock starts at day 1 for FDA. Depending on the quality of the sponsor's submissions, this process may occur several times. When the time is added up, it may well have taken three years or more from the date of the filing of the NADA for it to be approved.

The 180 day statutory time frame applies to the review of NADA applications--not to the approval of applications. With current resources, CVM meets this statutory time frame on over 90% of all submissions. However, for a whole variety of reasons identified in Section 512(d) of the FD&C Act, submissions may be determined to be unacceptable by CVM. Such submissions require additional work--in many cases involving additional research--by the sponsor. When corrections are made, a new animal drug application is amended--from a legal standpoint, it is resubmitted--and a second cycle of review, in accordance with the statutorily imposed time frame--or a more stringent CVM-imposed time frame--begins. Depending upon the quality of the initial submission, an NADA may go through a number of cycles, each involving an investment of time by the sponsor and by CVM. When added up, it may take three years or more from the date of initial NADA submission to its approval, even though all agency reviews comply with, or even significantly exceed, the statutory time frame.

DRUG APPROVALS

Question. What is the unobligated balance in the Prescription Drug User Fee account as of the end of fiscal year 1994 and what do you expect it to be at the end of fiscal year 1995?

Answer. The unobligated balance in the PDUFA account at the end of FY 1994 was \$34,146,420. As of

October 26, 1994, we estimated the end of year FY 1995 unobligated PDUFA balance would be \$47,827,494.

Question. What is the average time for generic drug approvals in each of the past ten years?

Answer. I will be happy to provide this information for the record.

[The information follows:]

Approval Times for ANDAs
(Number of Months)

<u>Year</u>	<u>Average</u>	<u>Median</u>
1984	13.2	8
1985	15.7	12
1986	14.2	11
1987	15.6	13
1988	18.1	15
1989	19.4	16
1990	30.2	25
1991	37.8	35
1992	35.1	34
1993	37.5	35
1994	30.3	24

Question. What is the current backlog of generic drug applications?

Answer. As of January 31, 1995, there were 38 backlogged ANDAs.

NUTRITION LABELING

Question. In connection with the regulations that FDA issued to implement the Nutrition Labeling and Education Act, you emphasized that the "nutrition facts" panel on food labels would permit consumers to make informed choices about the food they eat. You also have indicated, I believe, that consumers should consume less fat, fewer calories and more fiber. In light of that advice, I would have assumed that FDA would be facilitating the approval of fat substitutes, sugar substitutes and fiber sources, yet the record suggests otherwise. Isn't FDA's ability to act on these food ingredient petitions a major impediment to innovation in food technology that is depriving consumers of additional choices of healthy foods?

Answer. Petitions cover a broad range of substances used in food and packaging technology. These include fat replacers, high intensity sweeteners, preservatives--including microbial control agents and irradiation processes--colors, sanitizers, packaging materials, etc.

The Agency has focused a greater proportion of review resources to more complex petitions and issues involving novel ingredients such as fat replacers, high-intensity sweeteners, microbial control agents for the meat and poultry industry, etc.

The Agency has taken the following steps to speed or improve the petition review process:

- (1) The Center for Food Safety and Nutrition has initiated the practice of making more use of its federal research scientists and scientists from other federal agencies in the petition review process.
- (2) Petition review resources within the Center for Food Safety and Applied Nutrition have been organized under one central line management.
- (3) A Food Advisory Committee has been established to advise the Center in resolution of the more complex or novel issues.
- (4) A "Threshold of Regulation" approach to indirect additives has been published as a proposal in the Federal Register for indirect additives. This proposal set out a process for determining when the likelihood or extent of migration to food of a substance used in a food-contact article is so trivial as not to require regulation of the substance as a food additive. The proposal defines two types of thresholds for regulation of substances used in food-contact articles. The first type of threshold will, if adopted, exempt from regulation those substances used in food-contact articles where the resulting dietary concentration would be at or below 0.5 ppb. The second type of threshold will exempt currently regulated direct food additives for use in food-contact articles where the resulting dietary exposure would be at or below 1% of the current acceptable daily intake (ADI) for these substances.
- (5) A Special Project Team has been initiated to expedite indirect food additive petitions.
- (6) A Regulatory and Science Policy Board has been created to set policy for nonroutine petitions and issues, thus, expediting resolution of complex problems.

In addition to these steps, FDA has taken action on a significant number of new uses for sugar substitutes this year. We should point out, however, that while innovation is important, it remains essential that new substances be safe. While FDA is working hard to speed

up its process, it cannot proceed any quicker than the scientific evidence allows.

HEALTH CLAIMS AND NUTRIENT CONTENT CLAIMS

Question. Dr. Kessler, I understand that there has been a good deal of criticism of the FDA's implementation of the health claims and nutrient content claims provisions of the Nutrition Labeling and Education Act. Do you intend to reconsider those rules in order to encourage food companies to provide more information on labels about the nutrition and health benefits of their products?

Answer. The Agency has received some criticism on certain aspects of the regulations that were required to implement the NLEA. In view of the comprehensiveness of these regulations, the concerns in general have focused only on a few provisions of these regulations.

FDA's initial approach was to structure the format of the health claims so that they are scientifically complete and not misleading to the consumer. Subsequent experience and study have shown that it may be possible to provide more flexibility to industry. FDA is currently reevaluating its position. However, any increase in flexibility must be so structured as to not change the significant scientific agreement standard.

FDA has met with representatives of the food industry and other interested parties to discuss areas that the agency could provide more flexibility to the food industry in making health claims consistent with the current statute. In October 1994, the National Food Processors Association (NFPA) petitioned FDA to reconsider several issues relating to health and nutrition claims. These issues are: allowing the additional use of synonyms for nutrient content claims; permitting the use of health claims based on the findings of certain public health service governmental bodies or objective panels of experts; modification of the prohibition against health claims for foods that contain high levels of fat, saturated fat, cholesterol, and sodium; modification of the prohibition of a health claim on a food in conventional form unless it contains 10 percent or more of RDI for vitamin A, Vitamin C, iron, calcium, protein or fiber; modification of the required elements for health claim; and permitting the use of more concise health claims on the front panel, referring the consumer to more complete information on the information panel. The Agency is currently considering these proposals.

Question. Dr. Kessler, the FDA's regulatory impact analysis of the Nutrition Labeling and Education Act regulations apparently acknowledges that much of the

benefits of the regulations would depend on how health claims are regulated. It noted that a more permissive regulatory approach to health claims would result in more nutritious diets and thus in greater benefits in terms of lives saved (56 FED. REG. 60869). And yet, FDA opted for what most observers regard as a extremely burdensome and restrictive approach, in terms of claims that can be made, products that qualify for making health claims, and undue rigidity in the wording of claims.

Would you please explain the disparity between FDA's restrictive approach that discourages health claim, and its claim of the benefits that will result from greater consumer information about nutrition and health?

Answer. FDA adopted its current approach to health claims because the statute (NLEA) required that FDA permit only claims that it had approved using the "significant scientific agreement" as the standard. The Agency feels it has interpreted the Act correctly and established appropriate regulations that are based on the best available scientific information and the Agency's perception of the intent of Congress.

The Agency focused on only most significant economic issues in the regulatory impact analysis (RIA) - extension of effective date and small business exemption. FDA's economic analysis raised a number of questions about the role of health claims in realizing nutrition benefits and of how regulating health claims would affect those benefits.

In the Federal Register of November 27, 1991,--56 FR 60869--FDA discussed the benefits of health claims based on how they are regulated. The Agency stated that if mostly incorrect claims are prohibited, consumers will benefit from only seeing those claims that are correct. On the other hand, if claims that are likely to be true are removed, this will decrease the total benefits of the 1990 amendments as consumers will lose valuable information.

FDA raised the question as to whether or not health claims were the motivating force behind consumer behavior. If so, benefits would be dependent on how they were regulated and on whether existing claims were truthful or misleading. FDA did not receive comments supported by data or analysis that was convincing as to whether or not health claims were the driving force behind consumer change or, even if they were, how benefit estimate would be affected.

Industry advocates of more flexibility are calling for disclosure, rather than disqualifying levels and the elimination of preclearance for certain types of health claims. One of the costs of not preclearing health

claims is a loss of consumer confidence in the accuracy of label information, i.e., one bad label may spoil the trust in many. Thus, if FDA policy were structured to take ex post action against a misleading label, consumers may decide that all labels are potentially suspect and not be influenced by those that provide good signals directing them toward healthy foods.

RENTAL PAYMENTS TO GSA

Question. The fiscal year 1996 request proposes to maintain the fiscal year 1995 level of funding of \$46,294,000 for rental payments to the General Services Administration (GSA). The FDA budget justification indicates that this request does not include the costs of special services for which FDA must pay GSA on a reimbursable fee-for-service basis (e.g., special guard services, around-the-clock heating, and air conditioning where required).

What is the current cost of these special services to the FDA and what is requested for such services for fiscal year 1996?

Answer. The costs in FY 1995 and FY 1996 are estimated to be \$5.4 million and \$5.5 million respectively.

Question. Where is this funding included in FDA's budget?

Answer. This funding is included as overhead in each of the budget activities in the Salaries and Expenses Appropriation.

BUILDINGS AND FACILITIES

Question. FDA's headquarters consolidation has been funded through the General Services Administration Federal Buildings Fund.

What is the current schedule for that project?

Answer. The consolidation of all FDA programs in the Washington, D.C. area will be completed by 2003. In order to assure completion of the project by that date, Congress will have to act favorably on the GSA budget request now and will have to approve funding requests in succeeding fiscal years.

Question. What is the current projected cost of the project?

Answer. GSA currently estimates the total project to be \$810 million. However, over a 20-year period, commencing in the year 2003, the consolidation of FDA

programs is expected to save in excess of \$1 billion over currently projected leasing costs. The project will not only greatly enhance FDA's operational capability, but will significantly reduce operating expenses. GSA and FDA are working closely together to keep project costs as low as possible.

Question. When this consolidation is complete, will FDA need to occupy any of the 40 buildings in 15 separate locations in the Washington area which now house its headquarters components? If so, which will still be needed?

Answer. FDA currently occupies nearly 50 buildings in 18 separate locations. As user fee staffing has been added to the Center for Drug Evaluation and Research (CDER) programs and user fee hires have likewise been added to programs of the Center for Biologics Evaluation and Research (CBER), it has been necessary to further fragment these programs and others in order to provide the space to house the new employees.

When consolidation is complete, the only currently occupied buildings that will be retained include the Agency's Module I facility in Beltsville, Maryland, and the Beltsville Research Facility, formerly known as SPAL - Special Pharmacological Animal Laboratory, located on the same Beltsville, Maryland property. New laboratory facilities for FDA's Center for Veterinary Medicine (CVM) are now under construction on this site.

Question. For fiscal year 1995, \$9.8 million was provided for site acquisition and design work for replacement of the Los Angeles field laboratory.

How much of this \$9.8 million has been obligated to date and for what purposes?

Answer. I will be happy to provide this information for the record.

[The information follows:]

The \$9.8 million has been obligated for the following purposes:

a) Purchase of land ¹	\$6,250,000
b) Site studies ²	750,000
c) A/E design services ³	<u>2,800,000</u>
TOTAL	\$9,800,000

¹Even if land acquired is federally owned, the gaining Agency, must pay the holding Agency fair market value for the land.

²Site studies include environmental assessment, geotechnical report based on soil borings, site development plan, etc.

³Professional architect/engineer services include design of building, limited by statute to 6 percent of construction cost, and post contract services, such as shop drawing review, site inspection visits, etc.

Question. What is the total cost of the land purchase for the replacement facility?

Answer. FDA is currently negotiating with land owners responding to the solicitation of interest which appeared in the local papers of Orange County, California in early December 1994. Based on responses received, the price FDA will pay for the land will not exceed \$6,250,000.

Question. How much will be required for design and engineering costs?

Answer. Actual design of the new laboratory building will cost \$1,800,000, or less, since the statutory limit on A/E fees is 6 percent. Not included in design fees are special studies such as environmental assessments, soil borings and preparation of a geotechnical report, printing and reproduction of documents, etc. Also not included in A/E design fees are so called "post contract services" which may include review of shop drawing submissions by the construction contractor and actual supervision of construction. The amount set aside for site studies on the project is \$750,000, while the amount reserved for shop drawing review and periodic inspection visits by the A/E is \$1,000,000. Actual supervision of construction on a daily basis by a quality construction manager (CQM) is expected to cost about 8 percent of the construction cost.

Question. What is the estimated total cost of the project? Please identify construction costs separately.

Answer. I will be happy to provide this informatin for the record.

[The information follows:]

Land acquisition	\$ 6,250,000
Special studies	750,000
A/E design	1,800,000
Shop drawing review by A/E	1,000,000
Construction of laboratory	30,000,000
Construction supervision (CQM)	2,400,000
Contingency allowance (5%)	<u>1,500,000</u>
Sub-total	\$43,700,000
Escalation to June 1998	<u>4,045,594</u>
Total	\$47,745,594
Less funds already appropriated	<u>9,800,000</u>
Funds needed by FY 1997	\$37,945,594

Question. What is the current schedule for the project? When will construction funds be required?

Answer. Required land will be conveyed to FDA control by mid to late August 1995. Design of the new laboratory will commence shortly thereafter, but certainly not later than October 1, 1995. Design work is expected to take approximately 12 months. We currently expect that construction funds will be needed by October 1, 1996.

BUILDINGS AND FACILITIES

Question. What is the condition of FDA's current Los Angeles field laboratory?

Answer. This facility was built 33 years ago and is in generally poor condition. I will be happy to provide for the record information on the condition of the facility.

[The information follows:]

CONDITION OF THE LOS ANGELES FIELD LABORATORY

ARCHITECTURAL COMPONENTS: The under-structure of each floor is coated with a fireproofing material containing asbestos. Accessibility to the building does not meet current ADA handicap codes. Interior stairwells are open and do not meet current fire codes. The ceiling system is saturated with asbestos dust (top side), ceiling support system is deteriorated causing the ceiling to bow, and ceiling tiles are warped which was caused by leaking sanitary/lab waste piping. Flooring is vinyl asbestos and is chipped and loose in some areas. The interior wall surfaces throughout the facility are in need of repair and painting. The roofing system has had severe leaks in the past year.

Laboratory casework and fume hoods are in need of repair and/or replacement. Fume hoods do not meet current safety operation standards.

MECHANICAL/PLUMBING SYSTEMS: The heating ventilating and air conditioning systems (HVAC) require replacement and upgrading and do not meet the current laboratory air quality standards for class A laboratory. The current air distribution system recirculates and returns air via ceiling plenum which has surface materials that contain asbestos. Laboratory air systems do not have humidity control and adequate filtration. The fume hood exhaust systems can not meet current OSHA air flow requirements. The air systems in the building are totally out of balance.

ELECTRICAL SYSTEM: The current electrical distribution panels are completely full with no expansion for growing demand of research equipment. The existing electrical equipment does not have all the safety controls as compared to current day equipment.

Question. Why is replacement of this facility necessary?

Answer. Replacement is necessary because the landlord refuses to enter into any kind of reasonable lease arrangement. He wants FDA out of the facility due to its probable commercial value if used otherwise. Toward this end the landlord refuses to maintain the property in any kind of reasonable condition, and, even if it were feasible, will not expand or modernize it to serve FDA's minimal current needs for space and state-of-the-art conditions.

Even if this facility were to be modernized and released, the cost would far exceed the amount required for construction by FDA of its own facility in a safer environment.

Question. Would you please provide for the record a status report on the condition of FDA's district lab/office complexes nationwide, and the future funding projected to be required to repair, maintain, or replace these facilities or the National Center for Toxicological Research, and the year in which it will be required.

Answer. I will be happy to provide information for the record that provides a conceptual approach to FDA field laboratory consolidation.

[The information follows:]

LETTER FROM DAVID A. KESSLER

August 5, 1994

The Honorable Dale L. Bumpers
United States Senate
Washington, D.C. 20510-0401

Dear Senator Bumpers:

This is in response to your and Mr. Durbin's letter of May 5, 1994, that directed the Food and Drug Administration (FDA) to provide our plans to address the FDA's long-range field laboratory needs to the committees on appropriations. The attached report outlines a conceptual approach to FDA field laboratory consolidation, but does not represent a commitment to a specific course of action, time table, or allocation of budget resources. Such details remain to be addressed in the context of annual budget and appropriations processes.

As you know, FDA currently operates 23 facilities with laboratories that are outside the Washington, D.C., metropolitan area. These include the National Center for Toxicological Research (NCTR) at Jefferson, Arkansas; three laboratories managed by the Center for Food Safety and Applied Nutrition (CFSAN); one laboratory managed by the Center for Drug Evaluation and Research (CDER); and 18 laboratories managed by the Office of Regulatory Affairs (ORA). The

location of the laboratories, their size, current staffing and lease expiration dates are set forth in Attachment 1.

The Center laboratories principally provide basic and applied research or other analytical capabilities in support of the Center's mandate. The 18 ORA laboratories provide definitive answers to questions of safety, purity, and effectiveness for the broad range of FDA regulated products -- foods, human and veterinary drugs, biologicals, medical devices, radiation emitting products and cosmetics.

The ORA laboratories are continuing to provide the Agency with the reliable scientific information it needs. Time and the advance of science and technology, however, have rendered many of them obsolete, both in terms of their physical plants and the analytical tools they employ. Increases in FDA's laboratory staff have contributed to overcrowding. These factors contribute daily to a loss of efficiency. When combined with deterioration of the neighborhoods in which some of the laboratories are located, they also give us cause to have serious safety concerns for our employees at several of the locations.

In addition, we are finding that facilities costs are the fastest growing item in the FDA budget in a time of constrained budgets. Our maintenance and repair costs have significantly contributed to increased facility expenses because many of them are old and in need of major repairs.

The above factors were considered when ORA initiated a management review of the field operational process that had basically not changed for more than 30 years. This review led us to conclude that it was time to restructure and modernize our operational process including the laboratory infrastructure. To develop a laboratory restructuring plan, we solicited widespread input on how best to update our facilities. Numerous work groups were established to examine various facets of the problem and to make recommendations to senior officials. These work groups consisted of laboratory staff, including union members, and field management. Recommendations concerning how best to conserve resources over time, including a consolidation of field laboratories, were examined by senior managers. Meeting the goals identified in the National Performance Review was an important consideration during this process.

These deliberations resulted in a plan which calls for consolidation of the ORA field laboratories over a 20-year period. The plan would result in the reconfiguration of the current 18 ORA laboratories into nine laboratories: five multi-capability laboratories and four smaller special focus laboratories. I wish to stress that an FDA presence, specifically our field investigative and compliance personnel, would remain in each city where presently located. Only the laboratory component of our activities would be closed at the planned locations. Attachment 2 includes a map indicating the planned consolidated laboratory locations and a copy of the agency's plan for implementing and managing the restructuring of the field laboratories.

Our analysis demonstrates that the establishment of five multi-capability and four special focus laboratories would result in:

- reduced facilities and maintenance costs,

- greater operational efficiency,
- enhanced quality laboratory work,
- more efficient utilization of equipment and staff, and
- more successful recruitment and retention of high calibre staff.

For example, consolidation will provide us with sufficient staff to permit shift work.

Moreover, the restructuring plan advances the goals of the National Performance Review. It will enable us to:

- reduce senior level positions,
- increase supervisory ratios, and
- move decision making closer to the organizational level by reducing layering.

A cornerstone of our plan consists of taking full advantage of the Agency owned facilities and capabilities, located at the National Center for Toxicological Research in Jefferson, Arkansas. Besides the routine regulatory analytical capability planned for this facility, FDA would identify specific programs or functional areas that would benefit from the support of the existing research capability and that would achieve efficiencies obtained from a central location. Suggested functions include:

- (1) extended microbiological analyses, particularly those involving animal assay techniques;
- (2) studies of the contaminant levels of foods;
- (3) surveys and profiling of food products;
- (4) sample analyses necessary to standards setting and enforcement of the Nutrition Labeling and Education Act; and
- (5) an expanded capability to analyze medical devices for defects.

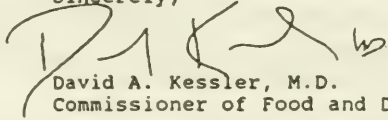
Preliminary architectural and engineering reviews for ORA facilities at NCTR are underway in accordance with spending authority granted by our Subcommittees in Fiscal Year 1994.

Another critical component to FDA's plan is the expansion and replacement of the current laboratory and office facilities in New York and Los Angeles. Both of these facilities must be replaced, even if the planned restructuring is not implemented. In the case of New York, GSA already has secured approval and funds from the Congress for a new facility and expects to let a construction contract in the near future. Recognition of the dire need for a new facility in Los Angeles was reinforced after a site visit by the House Appropriations Committee's investigations staff and House action on FDA Fiscal Year 1995 appropriations.

While the Department agrees with the broad concept of the plan, we recognize the need to develop fuller cost implications. We should note, as well, that two of the five Center-managed field laboratories identified above also are under study for possible reconfiguration: CFSAN's Northeast Technical Services Unit at Davisville, Rhode Island, whose principal activities involve the safety of seafood and CDER's Division of Drug Analysis facility at St. Louis, Missouri.

We recognize that final decisions regarding the entire effort to restructure the laboratory facilities will be dependent on the continuing support of the Administration and the Congress. Thank you for this opportunity to share information concerning FDA's field laboratory plans. I am sending a similar letter to your cosigner. If I can be of further assistance, please feel free to contact me.

Sincerely,

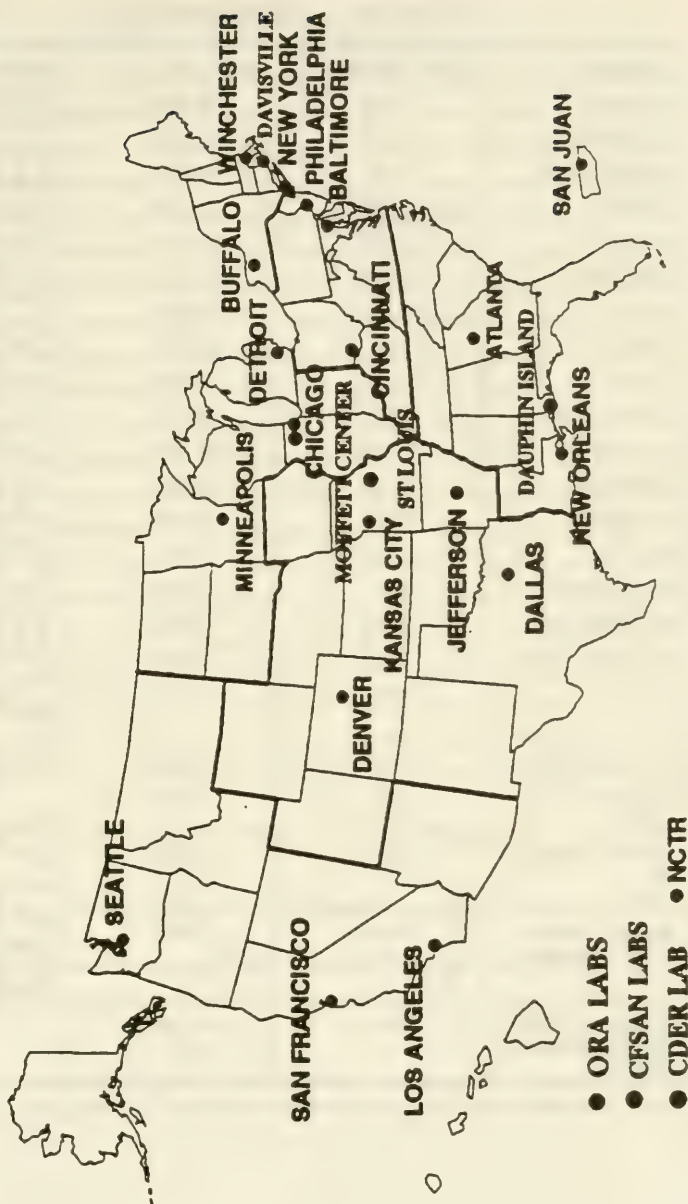
A handwritten signature in dark ink, appearing to read 'D. A. Kessler', with a stylized flourish at the end.

David A. Kessler, M.D.
Commissioner of Food and Drugs

Attachments:

- 1) Map showing the locations of the present laboratory facilities and a list of current field laboratory facilities including information on lease expiration dates, size, and staffing
- 2) A map of planned laboratory locations and Plan for Implementing and Managing the Restructuring of Field Laboratories

FIELD LABORATORIES



FIELD LABORATORIES

LOCATION	LEASE EXPIRES	SIZE (Sq. Ft.)	STAFFING (FTE)
ATLANTA	11/05	36,000	100
BALTIMORE	01/95	12,600	46
BOSTON (WEAC)	N/A	24,600	65
BUFFALO	10/94	9,100	21
CHICAGO	11/97	16,900	19
CINCINNATI	07/94	13,000	58
DALLAS	01/96	10,200	37
DENVER	N/A	16,500	51
DETROIT	05/98	13,000	33
KANSAS CITY	06/02	33,500	50
LOS ANGELES	03/98	12,000	54
MINNEAPOLIS	02/95	12,800	44
NEW ORLEANS	07/98	8,400	26
NEW YORK	N/A	32,000	103
PHILADELPHIA	N/A	9,900	28
SAN FRANCISCO	02/14	27,000	51
SAN JUAN, P.R.	N/A	5,900	18
SEATTLE	N/A	24,000	69
ST. LOUIS/CDER	N/A	11,900	66
DAVISVILLE, RI CFSAN	N/A	4,000	15
DAUPHIN ISLAND, AL CFSAN	N/A	13,900	26
MOFFETT CENTER CFSAN (Chicago)	12/00	12,000	38
NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH	N/A	1,024,354	534

N/A : non applicable because the space is located in Federally owned property.

21ST CENTURY ORA LABORATORIES



FLD\AB21.DRW

PLAN FOR IMPLEMENTING AND MANAGING THE RESTRUCTURING OF FDA'S OFFICE OF REGULATORY AFFAIRS FIELD LABORATORIES

I. INTRODUCTION

Field laboratory restructuring is at best a very difficult and problematic task. The following plan is intended to begin the implementation of decisions made by senior management of the Food and Drug Administration (FDA) regarding FDA field laboratories. The plan begins what is envisioned as a continuous and dynamic process which will lead to laboratories that better support the science function in the Office of Regulatory Affairs (ORA) and provide the absolute best working environment for our people. This plan is consistent with the National Performance Review goals in such areas as: (1) increasing supervisory ratios; (2) reducing layering in the organization; and (3) moving the decision making process closer to the organizational level. Moreover, the plan is consistent with Executive Order 12871 dealing with labor-management partnerships. It will give extensive visibility to the concerns of our employees and assures that ORA management never loses sight of its number one asset--people. This report outlines a conceptual approach to FDA field laboratory consolidation, but does not represent a commitment to a specific course of action, time table, or allocation of budget resources. These details remain to be finalized, and addressed in the context of annual budget and appropriations processes.

ORA laboratory facilities that were once state-of-the-art have become outmoded. To the many field laboratories that were constructed in the 1960's, time and technology have brought changes in: the manner of transporting samples; the types of analyses performed; the means of analysis; and the ways of handling the resulting data. One-for-one replacements or

renovations of old facilities have been made without consideration of an overall ORA strategy for the future.

Accordingly, an assignment was given by the Associate Commissioner for Regulatory Affairs to the ORA Senior Management team in January 1993 to explore how the ORA field laboratory system might be best restructured and organized to meet the challenges of the 21st Century. ORA initiated this process by convening the Laboratory Analysts Advisory Committee during the summer of 1993. The committee consisted of representatives from each field laboratory and research center. During the first quarter of Fiscal Year 1994, ORA also formed a Laboratory Directors Steering Committee, which consisted of seven field laboratory directors, a field science advisor and a representative of ORA's Division of Field Science. The reports prepared by each of these committees were consolidated into a document¹ presented to ORA senior management prior to the ORA Senior Staff Meeting in January 1994. Several laboratory organizational options were presented in the document.

Each option was reviewed and discussed and a consensus to restructure ORA's laboratory system was reached by the ORA Senior Staff during the January 12-14, 1994,*Senior Staff Meeting. A decision was made to provide an implementation plan for restructuring the ORA labs and to manage the process` consistent with meeting the needs of laboratory employees and the ORA Strategic Proposal. Moreover, the implementation plan will provide a clear vision, to ORA employees, ORA's customers, FDA top management and others, of a more streamlined, efficient ORA laboratory organization for the 21st Century to implement agency programs in a cost-effective manner.

¹*Options Paper Re: Reorganization of ORA for the 21st Century*

This plan is intended to offer general guidance on how to implement and manage the restructuring decisions. It is not all-inclusive, nor is it a rigid proposal. It is a dynamic plan intended to be used as a flexible blueprint for the future with changes to be made as necessary. The Division of Field Science will work with the Facilities Field Advisory Committee and the field to coordinate and consult on the implementation of ORA's vision of field science in the 21st Century. Local management, through partnership and effective labor relations with local unions and/or staff groups, will have the primary responsibility for carrying out the events and activities that affect their laboratory.

II. BACKGROUND

Over the course of their history, the numbers and locations of FDA field laboratories have changed many times. The reconfigurations that took place in the past were often in response to the same two competing forces that we face today, with sometimes one and sometimes the other predominating: the need to consolidate and the need to expand. It is informative to consider how these competing elements have been manifest in the history of the field laboratories.

In 1907, when the Bureau of Chemistry, U.S. Department of Agriculture began to enforce the Food and Drugs Act of 1906, there already were six Branch Laboratories located in the field. They had been established to examine samples of imported foods in a program authorized by the Department of Agriculture Appropriations Act of Fiscal Year 1900. Under this Act, the Bureau was authorized to examine imported foods and exclude those which were dangerous to health. Originally, all such examinations were made in the Washington laboratories, but in 1903, a laboratory was

established in San Francisco because of the time required for shipping samples to Seattle. In 1904, another was established in New York, and in 1905 and 1906, laboratories were opened in Boston, Philadelphia, Chicago, and New Orleans. By 1911, 16 more field laboratories had opened, for a total of 22. Most of them were located in government-owned space, especially at the seaports, where an effort was made to co-locate with Customs.

In 1913, the agency began to consolidate laboratory facilities by closing seven of the smaller labs. The following year, the field service was reorganized into three large geographic districts--Eastern, Central, and Western--with a single manager in charge of both inspection and laboratory personnel in the District. By 1917, the Districts were further subdivided into Stations with one manager, usually the Chemist in Charge of the laboratory, charged with supervising all personnel in their territory. The territories covered by the laboratory and the inspectors were made uniform at that time.

Laboratories continued to be established and closed. In the 1920's and 1930's, the Honolulu and San Juan laboratories were closed for economic reasons. The Kansas City laboratory, which had been opened in 1908 and closed in 1914, was reopened in 1926. New labs were opened in Baltimore and Los Angeles, and the Savannah station with its laboratory was moved to its present location in Atlanta, because of the growth of that city as a center of commerce. In the 1940's, three substation laboratories were established because of political pressure brought by importers who sought quicker service in handling their importations than furnished by New Orleans and Seattle stations. The Pittsburgh laboratory was also probably the result of political pressure, since, at that time, there was considerable agitation by people of Pittsburgh to have the Buffalo office moved

there on the grounds that Pittsburgh was a much larger city. Two additional district laboratories were established. The Detroit District opened in 1959 (a Detroit laboratory had previously been opened in 1908 and closed in 1914), and the Dallas District laboratory opened in 1961. The St. Louis District laboratory was phased out as a field laboratory in 1963 and replaced with a laboratory assigned to the Bureau of Drugs. Currently, this laboratory operates as the Division of Drug Analysis, Center for Drug Evaluation and Research. In 1987, the Boston District laboratory was merged with the Winchester Engineering and Analytical Center (WEAC).

It is clear that change has been the one constant throughout the history of the field labs.

The function, geography and structure of field laboratories have been evolving. The present organizational structure is the result of a very rich and proud history but must now be adjusted to accommodate growing resource constraints, the pressure to improve efficiency and reduce the size of government, changing program priorities, the introduction of global standards, the rapid growth of science and technology, and the cost of this new technology.

III. OBJECTIVE

The objective of ORA's laboratory restructuring plan is to provide guidance and direction for cost effective planning that will ensure modern, state-of-the-art facilities for conducting ORA regulatory analyses and research to meet agency program needs for the 21st Century.

IV. ORA's LABORATORY VISION FOR THE 21st CENTURY

ORA has laboratory facilities housed in 18 different locations across the country, employing 650 operating personnel (chemists, microbiologists, entomologists, etc.) and 275 support personnel (supervisors, aides, clericals, etc). All are dedicated people who are very proud and supportive of FDA's mission to promote the health and welfare of the American people. FDA is an agency whose mission requires flexibility, adaptability, and accessibility. It also has a proven record of outstanding success in consumer protection. The key to this success has been its people and the solid foundation of field science upon which regulatory decisions depend. Laboratory restructuring will strengthen the well-recognized, respected, and supported regulatory science conducted in ORA's field laboratories.

Many of ORA's present facilities are old, in need of major repair, and do not meet FDA's needs as facilities for conducting regulatory science as we move into the 21st Century. ORA's vision for laboratory restructuring includes:

- Five large total capability regulatory laboratories, four to be located in states in each corner of the country, New York, Georgia, California, and Washington, and a large total capability regulatory laboratory to be located in Arkansas.
- Four special purpose regulatory laboratories, to be located in Winchester, MA; Cincinnati, OH; Philadelphia, PA; and San Juan, PR.
- The Winchester Engineering Analytical Center (WEAC), Winchester, Massachusetts, would be maintained as a radionuclide analysis and engineering center only. Other

laboratory functions would be merged into the Northeast total capability laboratory located in New York.

- The new Cincinnati, Ohio, laboratory construction would support the Forensics Chemistry Center.
- The Philadelphia, Pennsylvania, laboratory facility would be maintained and enlarged as a drug analysis laboratory.
- The San Juan, Puerto Rico, laboratory facility would be maintained and enhanced as a drug analysis laboratory. The large concentration of drug firms in Puerto Rico requires analytical support for drug analyses and investigator/analyst team inspections. All other analytical programs would be handled by another ORA lab and through enhanced cooperation with the Commonwealth of Puerto Rico.
- ORA Research Centers (Animal Drugs, Natural Toxins, Pesticide and Industrial Chemicals, Seafood Products, and Total Diet) to continue and to be co-located with regulatory laboratory facilities.

V. IMPLEMENTATION PHILOSOPHY

It is intended that this plan will assure the highest level of consumer protection, continued employment of affected employees, and responsiveness to regulated industry, despite a reduced presence of FDA laboratory personnel in some locations around the country. The plan will be implemented in stages with continuous evaluation and participation by affected units and people.

The following items will constitute a "People Plan" to assist the employees affected by this initiative to cope with the changes and

help them attain the fullest personal and professional outcomes. This is consistent with ORA's philosophy of involving employees throughout its organization.

In order to respond to the needs of its employees:

- A. An ORA People Committee representing a diversity of employees (various position classes, grades, locales, etc.) will be formed to help ensure input and participation at all levels of ORA laboratories. This committee will have an extremely important role in interacting with all of the other groups and committees involved in the implementation plan.
- B. ORA will assess the desire of personnel, in appropriate locations, to relocate or consider other career alternatives. ORA will offer employment at alternative worksites to all employees who are displaced by laboratory restructuring.
- C. ORA will bring consultants and employee assistance specialists on board to facilitate transition activities, such as relocation, spouse employment placement, career transitions, retirement planning, and related issues.
- D. On a local basis, each office will establish a joint Bilateral Labor-Management Council to review, evaluate, schedule, coordinate and set in motion the actions prescribed in the document, whether they be to enlarge or to phase out functions of that facility. This Bilateral Council will work to help set the agenda of events and ensure that the interests of employees are

recognized, including those of the Federal Women's Program, Equal Employment Opportunity, Hispanic, Handicapped, and others. We expect this council to provide the focal point for employees and management to discuss issues of common concern and to develop proposals to solve problems affecting employees.

- E. To provide consistency and appropriate uniformity to the council processes, if an issue cannot be resolved at the local level, it will be brought to the attention of ORA. ORA management may then refer the issue to one of the other implementation proposal committees for recommendation of a resolution. If the issue cannot be resolved, a representative from the councils involved will meet with ORA top management to resolve the issue.
- F. ORA will provide opportunities for training or retraining such as:
 - 1. Offer interpersonal skills workshops, such as managing change and team building, to facilitate a better understanding of the human side of laboratory restructuring. In addition, a problem solving WIN/WIN negotiations course will be made available. Training to help both management and employees deal with the impact of restructuring will be offered as part of the team building effort.
 - 2. Identify, develop, and present special seminars and workshops to help make employees aware of employment opportunities in other parts of the agency and the steps they need to follow to take

advantage of them (e.g., job restructuring, preparing effective job applications, etc.).

For the purposes of offering ORA employees additional relocation opportunities, ORA will invite scientists from the headquarters' Centers and FDA science facilities at Dauphin Island, Alabama; NCTR; St. Louis, Missouri; and North Kingstown, Rhode Island, to describe their program activities and discuss possible employment opportunities at these locations. This information may be communicated in person or through audio-visuals or other means of communication. As opportunities for details at these sites become available, employees will be encouraged to apply to help them make informed decisions on the relocation issue.

3. Develop and establish formal training initiatives to assist laboratory employees. These initiatives include the development of technical workshops to assist employees in bridging into new positions of their interest.

Senior ORA managers will be available for face-to-face meetings with employees. Open communications will be encouraged throughout the process.

A "hot line" phone network will be established throughout the field to respond to questions from employees and to ensure that up to date, accurate information is provided.

ORA cares about its people. This agency can ill-afford the loss of employees and will provide strong emphasis on sustained employment of all employees affected by this restructuring. No Reduction in Force is projected or anticipated. Issues of employee rights, fairness and seniority will be addressed, as well as the selection process for displaced employees into gaining facilities. Employees will be informed of all options available to them, and they will receive assistance when they request it.

VI. COMMUNICATIONS

ORA is initiating a comprehensive communication program as part of implementing the laboratory restructuring project. The objectives of the communication program will include: (1) working with employees to gain a shared understanding of operational matters that necessitate the restructuring of field laboratories; (2) enlisting the active involvement of employees in an effort to implement this plan; and (3) providing frequent, authoritative information to eliminate rumors and unfounded concerns.

A variety of approaches will be used in getting out the facts on the new organizational structure. Meetings, electronic messages, conference calls, newsletters, special reports, focus groups, etc., will be used to disseminate authoritative information on all aspects of field laboratory restructuring. Information flow will be informal, accurate, and complete. Question and answer periods will be provided, with a strong emphasis placed on responding to employees' concerns in a time of difficult choices.

Senior ORA managers will be available regularly for face to face meetings with employees, consumers, the regulated industry, state officials, and congressional staffers to answer questions on the

agency's strategies for the 21st Century and how and why field laboratory restructuring is a major part of the agency's program.

VII. SUMMARY OF PLANNED LABORATORY RESTRUCTURING

NORTHEAST REGION

Buffalo, New York - No new laboratory construction. Maintain current facility pending redistribution of analytical work.

Winchester Engineering Analytical Center (WEAC)

Winchester, Massachusetts - Maintain as a radionuclide analysis and engineering, medical device center only. Other laboratory functions to be merged into Northeast total capability laboratory when appropriate.

Northeast Regional Laboratory - Prospectus approved for new construction. Assimilate other field science laboratory functions when appropriate.

MID-ATLANTIC REGION

Baltimore, Maryland - No new laboratory construction. Maintain current facility pending redistribution of analytical work.

Cincinnati, Ohio - Prospectus approved for new laboratory construction solely to support the Forensics Chemistry Center. Maintain current District Laboratory facility pending redistribution of analytical work.

Philadelphia, Pennsylvania - Maintain and enlarge present facility.

SOUTHEAST REGION

Atlanta, Georgia, Southeast Regional Laboratory - Maintain and enlarge present facility. Assimilate other field science laboratory functions when appropriate.

New Orleans, Louisiana - No new laboratory construction. Maintain current facility pending redistribution of analytical work.

San Juan, Puerto Rico - Maintain and enhance as a drug analysis laboratory.

MIDWEST REGION

Chicago, Illinois - No new laboratory construction. Maintain current facility pending redistribution of analytical work.

Detroit, Michigan - No new laboratory construction. Maintain current facility pending redistribution of analytical work.

Minneapolis, Minnesota - No new laboratory construction. Maintain current facility pending redistribution of analytical work.

SOUTHWEST REGION

Dallas, Texas - Maintain current facility pending redistribution of analytical work.

Kansas City, Kansas - Maintain current facility pending redistribution of analytical work.

Denver, Colorado - Maintain current facility pending redistribution of analytical work.

ORA Arkansas Regional Laboratory - Establish a laboratory to support ORA science functions. Assimilate other field science laboratory functions when appropriate.

PACIFIC REGION

San Francisco, California - Maintain current facility pending redistribution of analytical work.

Los Angeles, California - Replace current laboratory. Assimilate other field science laboratory functions when appropriate.

Seattle, Washington - Maintain and enlarge present facility. Assimilate other field science laboratory functions when appropriate.

The new configuration would strengthen ORA's research programs, its pre-approval and post-marketing surveillance programs, and the scientific support of regulatory decisions. ORA anticipates a 20-year implementation period before arriving at the new field

laboratory structure. Implementation will be scheduled to minimize disruption in both the gaining and losing facilities, and would be done in a common-sense, people-sensitive manner.

LETTER FROM SENATOR BUMPERS AND REPRESENTATIVE
DURBIN

May 3, 1994

David A. Kessler M.D.
Commissioner
Food and Drug Administration
Parklawn Building
5600 Fishers Lane
Rockville, Maryland 20857

Dear Dr. Kessler:

We are writing to direct the Food and Drug Administration to reprogram \$2.5 million of the \$4.13 million allocated in 1994 within the rental payments account for repair and renovations at the National Center for Toxicological Research (NCTR). The \$2.5 million is to be reprogrammed for architectural and engineering expenses related to: (1) preparation of detailed cost estimates for consolidation, and (2) expansion of the NCTR facility.

The investigative staff of the House Committee on Appropriations have conducted a review of FDA's field facilities and we agree with their finding that there is urgent need to formalize a plan for FDA's future laboratory field structure. We therefore direct you to submit to the committees on appropriations, by July 1, a detailed plan addressing the FDA's long-range field laboratory needs, with supporting details on consolidation efforts.

If you have any questions, please do not hesitate to contact us. Thank you for your cooperation in this matter.

Sincerely,

Richard Durbin

Richard Durbin

Dale Bumpers

Dale Bumpers

CURRENT SERVICES

Question. Does this fiscal year 1996 FDA budget provide full funding for pay raise and other non-pay mandatory cost increases? If not, what level of funding is FDA required to absorb to meet these mandatory cost increases?

Answer. In our 1996 request, we have included \$9.8 million for pay-related increases. On page 12 on our Congressional budget justification, we show a summary of the total projected current services required for both pay and non-pay items. For pay-related costs, we estimated \$21.342 million; for non-pay-related costs we estimated \$8.475 million. We estimated FDA would be absorbing \$20 million in cost increases.

Question. I note that the fiscal year 1996 budget requires FDA to achieve \$772,000 in savings from management improvements. Specifically, \$560,000 will come from savings from the FTS 2000 telecommunications system and \$212,000 by reducing duplicative work in the regional offices. How was it determined that FTS 2000 will result \$560,000 in savings to FDA? Which administrative functions will be streamlined to reduce duplicative work in the regional offices?

Answer. FDA's budget authority is \$772,000 less in FY 1996 as a result of the anticipated savings Department-wide in the Federal Telecommunications System, FTS 2000 and in the Working Capital Fund (WCF) by reducing duplicative work in the regional offices. FDA's participation will result in a savings of \$560,000 in FTS and \$212,000 in streamlined common administrative servicing WCF efforts.

ORPHAN PRODUCTS

Question. There is some considerable interest in your orphan products and grants program. What is the current level for 1995 and what is proposed for fiscal year 1996?

Answer. The current funding level for 1995 is \$15,150,000. The proposed funding level for 1996 is also \$15,150,000.

Question. Please provide a summary of the number of grants, in what amounts, and for what purposes they were provided, in each of fiscal years 1994, 1995 and proposed for fiscal year 1996.

Answer. In 1994, 74 awards were made. Twenty-eight new studies, eight competing continuations and 38 noncompeting continuations and supplements received grant awards. The majority of these awards were for direct

costs of \$100,000 and a few were awarded \$200,000. Indirect costs were added to those amounts. Seventy- one of the awards were for drug and biological products, two awards were for medical devices and one award was for a medical food study.

In 1995, we estimate awarding grants for 45 new studies and 29 noncompeting continuation studies. Direct costs for most grants will remain at \$100,000 and a few at \$200,000 plus indirect costs. We will not know the types of studies to receive grant awards in 1995 until review of the applications has been completed.

In 1996, we estimate awarding grants for 24 new studies and 61 noncompeting continuation studies. Direct costs for most grants will remain at \$100,000 and a few at \$200,000 plus indirect costs. Types of studies to receive awards are not known at this time.

FDA MISSION

Question. You were a member of the so called "Edwards Committee" prior to being Commissioner. Its May 1991 final report pointed out the importance of a mission statement. The Committee provided a "Sample Statement of Purpose" that the Agency achieves its mission by a variety of means, including facilitation of the timely availability of products whose use the Agency must authorize. This aspect is critically important in light of recent, and past criticism of the FDA as being insensitive to this part of its mission. However, when you published FDA's mission statement two years later, this element was not included among the three primary goals in FDA's mission statement.

Is it possible that your lack of attention to this important aspect of "facilitating the timely availability of products" is a major cause of the slow-down in approvals that is bringing such criticism to FDA? Why was this important element not included in your mission statement?

(Note: FDA's 1993 statement only states "be a positive force in making safe and effective products available to the consumer".)

Answer. FDA believes it has complied with the Edwards Committee recommendations in this area, and FDA has taken many steps to recognize and carry out its pre-market responsibilities for expediting the availability of safe and effective products. With regard to FDA's mission statement and the priority it places on pre-market review, the Edwards Committee recommended:

"The FDA must clearly define its overall mission and develop a formal Statement of Purpose."; and "The FDA

must recognize that approval of useful and safe new products can be as important to the public health as preventing the marketing of harmful or ineffective products. Specifically, the FDA should develop a flexible range of regulatory pathways, all of which uphold current standards of safety and efficacy, but which reflect the fact that not all drugs, devices and foods are alike."

The Edwards Committee also provided a sample statement of purpose developed as an option for FDA review ("One example of a Statement of Purpose is set forth at the end of this chapter. This example contains key elements that should be addressed in any statement the FDA adopts.")

FDA agreed with these recommendations, and used the sample statement of purpose as a starting point in developing its mission and vision and including pre-market review as a very high priority in them. FDA has:

a. Highlighted in bold in the first sentence of FDA's mission statement that FDA is responsible "to protect and promote the health of the American people." This was how FDA highlighted the importance of its activities, including pre-market review, in promoting health.

b. Focused among the first three principles in its mission statement that FDA strives to: "Be a positive force in making safe and effective products available to the consumer, and focus special attention on rare and life-threatening diseases."

FDA has carried out this principle by placing high priority therapies in fast-track review procedures, widening early access to experimental therapies, and committing to and meeting performance goals to expedite prescription drug review. In addition, FDA has continued to emphasize the high priority of pre-market review in every FDA budget, and in planning for future efforts to streamline and improve the timeliness, quality and efficiency of pre-market reviews.

CENTER FOR FOOD SAFETY AND NUTRITION (CFSAN)

Question. What is the number of full-time equivalent (FTE) positions for the Center for Food Safety and Nutrition today versus three years ago?

Answer. The number of full-time equivalent positions for Center for Food Safety and Applied Nutrition follows:

Center for Food Safety and Applied Nutrition

Ceiling FTE's for FY 1993-1995

<u>FY 1993</u>	<u>FY 1994</u>	<u>FY 1995</u>
909	912	868

Question. My understanding is that there are approximately 65 Generally Recognized As Safe (GRAS) affirmation petitions pending that were submitted to the FDA by private persons, approximately twice the number that were pending ten years ago. I also understand that about one petition per year has been acted on by the FDA. Can you explain why it takes so long for FDA to act on these petitions, and why so few are acted on per year?

Answer. Substances whose use is GRAS are not subject to a requirement for explicit FDA approval prior to marketing. A company that submits a GRAS petition to FDA is asking for FDA's affirmation of their conclusion to avoid confusion in the marketplace. The GRAS petition process, unlike that for food additives, is not mandated by law but is voluntary. The criteria for GRAS status and for GRAS petitions are contained in 21 CFR 170.30 and 170.35.

Petitioners commonly market their products while FDA is reviewing their GRAS petition, although they do so at their own risk. FDA can and will challenge their decision if it has serious safety concerns but this is not likely for any substance that is the subject of a petition that meets criteria for Agency consideration. FDA does not consider GRAS petitions unless there is evidence that the substance has a long history of use or that there is publicly available information (published) that appears to support the petitioner's decision.

Food additives, on the other hand, may not be marketed legally prior to promulgation of a regulation by FDA. Considering FDA's review resources, inventory of food additive petitions, and the economic implications of the time to complete action on a food additive petition, FDA places priority on such petitions compared to GRAS petitions. While FDA attempts to address the needs of persons who submit GRAS petitions, it feels it must give priority to those who require regulation prior to marketing over those that may already be on the market, provided that the latter do not present serious health concerns. This is a primary reason that GRAS petitions take longer and there is an inventory of filed GRAS petitions before the Agency.

In summary, a GRAS petition requires both an evaluation of safety and a factually based decision on

why explicit FDA approval is not necessary. Seeing that many of these substances are already on the market, it is difficult to justify making such decisions as high a priority as for food additives where the premarket approval is required by law.

FOOD PETITIONS

Question. I have heard considerable criticism about the delays in the approval of drugs and medical devices by the FDA, and the review of new food ingredients. Please provide the Committee with the following, by fiscal year, beginning with fiscal year 1994:

- a. the number of pending indirect food additive petitions;
- b. the number of pending direct food additive petitions;
- c. for each pending petition, the date on which it was first submitted to the FDA;
- d. the number of indirect food additive petitions approved;
- e. the number of direct food additive petitions approved;
- f. for each petition which was approved, the date on which it was first submitted to the FDA and the date of approval;
- g. the number of pending GRAS petitions, broken down by those which were FDA-initiated and those petitions initiated by private persons;
- h. the number of GRAS petitions acted on; and
- i. for each GRAS petition, whether it is still pending or was acted on in the period between 1984 and 1994, and the date on which the petition was submitted to the FDA.

Answer. A petition is classified as "pending" if it is waiting for action by FDA or by the petitioner. When reviewing a petition, it is often necessary to request further information from the petitioner to correct significant deficiencies in the petition. Until this information is received, the petition is classified as "pending". I will be happy to provide the information on food petitions for the record.

[The information follows:]

a. Number of pending indirect food additive petitions.

The number of "pending" indirect food additive petitions beginning with the start of FY 1994 follows:

	<u>Inventory</u>
October 1, 1993	163
October 1, 1994	143
March 3, 1995	151

The Agency's Threshold of Regulation policy is expected to reduce the number of indirect food additive petitions received by the Agency. Under this policy, certain kinds of indirect additives will not have to go through the petitioning process but rather will be handled by a much less formal review involving communications by letter. We expect that the number of petitions received per year will drop while allowing FDA to support safe use of more food packaging components.

b. Number of pending direct food additive petitions

	<u>Inventory</u>
October 1, 1993	59
October 1, 1994	57
March 3, 1995	57

c. For each pending petition, the date on which it was first submitted to the FDA.

The information requested is in Attachment 1 (indirect additive petitions) and Attachment 2 (direct additive petitions) which follow:

ATTACHMENT 1

INDIRECT ADDITIVE PETITIONS PENDING

** PRIVATE **	MATS PROJECT SUMMARY STATUS REPORT	95-03-03
#	DATE REC	TITLE
12	880122	FAP 884067 CULTURIET PHENGARD COATING SYSTEM FOR USE IN BULK FOOD CONTAINERS
18	881122	FAP 984118 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE AS A CROSS-LINKING AGENT FOR EPOXY RESINS
20	880315	FAP 884079 N,N'-(2-CHLORO 1,4-PHENYLENE) BIS[4-[2,5-DICHLOROPHENYL) AZO]-3-HYDROXY-2-NAPHTHYLENE CARBOXYAMINE], CHROMOPHTHAL RED BRN, AS
21	880118	FAP 884080 CHROMOPHTHAL SCARLET RN
24	880406	FAP 884083 STYRENE/BUTADIENE ACRYLONITRILE COOLYMERS
31	880616	FAP 884095 DIMETHYLAMINE-EPICHLOROHYDRIN
51	881214	FAP 9M4125 IRRADIATED BEEF STEAKS FOR USE IN SPACEFLIGHT MEALS; NASA

74	811026	FAP 2B3593 CYCLOHEXYLSULFAMIC ACID FOR USE AS A CATALYST IN RESINOUS AND POLYMERIC COATINGS
80	821019	FAP 3B3677 DIALLYLDIMETHYL AMMONIUM CHLORIDE AND ACRYLAMIDE COPOLYMERS AS A RETENTION AID IN PAPER AND PAPERBOARD PROCESSING
90	750726	FAP 6Z3117 REVOKE 121.1041 - TRICHLOROETHYLENE CAUSING CANCER IN A WELL DESIGNED ANIMAL EXPERIMENT
156	820315	FAP 2B3627 2-(4-THIAZOLYL)-BENZIMIDAZOLE FOR USE IN REBROKING OPERATIONS IN THE MANUFACTURE OF FOOD CONTACT PAPER AND PAPERBOARD
165	820106	FAP 2B3620 SYNDIOTACTIC 1,2 POLYBUTADIENE AS A ONE WAY DISPOSABLE FOOD PACKAGING FILM (REFERENCE FAP 7B3257)
201	821220	FAP 3B3696 PARTIAL SODIUM SALT OF DIMETHYLDIALLYLAMMONIUM CHLORIDE-ACRYLAMIDE-ACRYLIC ACID COPOLYMER AS RETENTION DRAINAGE AID
205	840209	FAP 4B3786 COPOLYMER OF ETHYL ACRYLATE, METHYL METHACRYLATE AND METHACRYLAMIDE WITHMELAMINE FORMALDEHYDE USED IN COATING FILMS
221	851218	FAP 6B3908 SULFOSUCCINIC ACID 4-ESTER WITH POLYETHYLENE GLYCOL NONYLPHENYL ETHER, DISODIUM SALT AS A SURFACTANT
226	860519	FAP 6B3940 ACCURAC NP AS A RETENTION AID IN PAPER AND PAPERBOARD
242	861208	FAP 7B3979 N-METHYLGLUTARIMIDE/ACRYLIC COPOLYMERS AS ARTICLES OR COMPONENTS OF ARTICLES CONTACTING FOOD
245	870402	FAP 7B3994 VINYLIDENE CHLORIDE-VINYL CHLORIDE COPOLYMERS FOR USE IN HYDROGEN PEROXIDE (STERILIZED) FOOD PACKAGING SYSTEMS
248	870707	FAP 7B4012 HYDROGENATED DIPENTENE RESIN (CLEARON D) FOR USE AS A COMPONENT OF ADHESIVES AND COATINGS
250	861028	FAP 7M3974 IONIZING RADIATION TO REDUCE FOOD BORNE PATHOGENS IN POULTRY PRODUCTS
254	780925	FAP 8M3422 TO CONSIDER RADIATION PROCESSING AS A PROCESS INSTEAD OF AN ADDITIVE

345	880809	FAP 8B4105 POLY-1-BUTENE POLYMERS AND BUTENE/ETHYLENE COPOLYMERS AS ARTICLES OR COMPONENTS OF ARTICLES CONTACTING FOOD
347	890928	FAP 8B4110 POLY(ETHYLENE 2,6 NAPHTHALENE DICARHOXYLATE) (PEN) AS A BASIC RESIN IN ARTICLES OR COMPONENTS OF ARTICLES CONTACTING FOOD
348	881209	FAP 9B4122 DISODIUM 4-ISODECYL SULFOSUCCINATE AS A COMPONENT OF ADHESIVES AND AS AN EMULSIFIER AND/OR SURFACE-ACTIVE AGENT IN POLYMERIC FOOD CONTACT COATINGS
349	890123	FAP 9B4133 SODIUM SALT OF THE HOMOPOLYMER OF 2-ACRYLAMIDO-2-METHYL-PROPANE SULFONICACID AS A STABILIZER IN ADHESIVES CONTACTING FOOD
370	890123	FAP 9B4131 SODIUM SALT OF THE HOMOPOLYMER OF 2-ACRYLAMIDO-2-METHYL-PROPANE SULFONICACID AS A STABILIZER IN COATINGS CONTACTING FATTY AND AQUEOUS FOOD
371	890123	FAP 9B4132 SODIUM SALT OF THE HOMOPOLYMER OF 2-ACRYLAMIDO-2-METHYL-PROPANE SULFONICACID AS A STABILIZER IN COATINGS FOR PAPER AND PAPERBOARD
378	890222	FAP 9B4140 ALKYL (C14-C30) BENZENE AS A COMPONENT OF ADHESIVES FOR ARTICLES CONTACTING FOOD
387	890424	FAP 9B4149 2-PROPANAMIDE, N-{(3-DIMETHYLAMINO)PROPYL}-, POLYMER WITH 2-PROPENOIC ACID, SODIUM SALT AS A RETENTION AID/DRY STRENGTH AGENT IN PAPER AND PAPERBOARD; STOCKHAUSEN INC
405	890712	FAP 9B4158 IRGAZIN YELLOW 3RLTN AS A COLORANT IN POLYMERIC FOOD PACKAGINGS
408	890725	FAP 9B4162 CROMOPHTAL YELLOW 3GP AS A COLORANT IN POLYMERS CONTACTING FOOD
415	890728	FAP 9B4163 ETHYLENE POLYMERS AND COPOLYMERS GRAFTED WITH FUMARIC ACID OR MALEIC ANHYDRIDE FOR USE IN FOOD CONTACT SURFACES
437	891006	FAP 0M4181 COBALT 60 GAMMA RADIATION (3.0KGY) AS AN ANTIMICROBIAL TREATMENT FOR FRESH SEAFOOD
452	891213	FAP 0B4189 N-ALKYLGLUTARIMIDE/ACRYLIC COPOLYMERS FOR USE AS ARTICLES OR COMPONENTS OF ARTICLES INTENDED FOR USE IN FOOD CONTACT

456	900108	FAP 0B4194 FATTY ACIDS,C14-22, ESTERS WITH PENTAERYTHRITOL AND DISPENTAERYTHRITOLAS A RELEASE AGENT OF ARTICLES CONTACTING FOOD
464	900223	FAP 0B4197 AMMONIUM BIS (N-ETHYL-2 PERFLUOROALKYLSULFONAMIDO ETHYL) PHOSPHATES ASOIL AND WATER REPELLENT AGENTS FOR PAPER AND PAPERBOARD
471	900315	FAP 0B4201 CARBOXYL MODIFIED POLYOOLS AS COMPONENTS OF ADHESIVES OF COATINGS CONTACTING FOOD
475	900327	FAP 0B4204 NYLON MXD-6 TO BE USED IN ARTICLES FOR FOOD PACKAGING AND HANDLING
477	900340	FAP 0B4206 PERFLUOROALKYL ACRYLATE COPOLYMER(L-6681) FOR USE AS A WATER AND OIL RE-PELLANT IN PAPER AND PAPERBOARD
501	900726	FAP 0B4223 1,11(3,6,9 TRIOXAUNDECYL)BIS-3-(DODECYLT-HIO)PROPIONATE AS AN ANTIOXIDANT/STABILIZER IN POLYMERIC FOOD CONTAINER
516	901001	FAP 1B4233 N,N BIS(2-ETHYLHEXYL) AR METHYL 1H BENZO-TRIAZOLE 1-METLANAMINE AS COPPERDEACTIVA' OR FOR LUBRICANTS
524	901024	FAP 1B4238 A POLYMER BLEND OF ISOBUTYLENE BUTENE COPOLYMERS AND POLYPROPYLENE ASCOMPONENTS OF ARTICLES CONTACTING FOOD
529	901119	FAP 1B4241 DIBENZYLIDENE SORBITOL (DBS) FOR USE AS CLARIFYING AGENT IN ARTICLES IN- TENDED FOR CONTACT WITH FOOD
536	901220	FAP 1B4244 SILICONE ACRYLATE RESINS AS COATINGS OF ARTICLES INTENDED FOR USE IN CON- TACT WITH FOOD
540	910110	FAP 1M4246 THE USE OF LOW DOSE RADIATION TO SANITIZE SHELLFISH
555	910227	FAP 1B4256 STYRENE BUTADIENE METHACRYLIC ACID POLYMER AS COMPONENTS OF ARTICLESCONTACTING FOOD
556	910227	FAP 1B4257 STYRENE-N-BUTYL ACRYLATE-ACRYLIC ACID POLYMER AS COMPONENTS OF ARTICLESCONTACTING FOOD
559	910327	FAP 1B4259 AMEND 21 CFR 178.2010 - ANTIOXIDANTS AND/OR STABILIZERS FOR POLYMERS BYINCLUSION OF ALKYLTHIOPHENOLIC MIXTURE

563	910412	FAP 1B4262 POLYSULFONE COPOLYMERS AS ARTICLES OR COMPONENTS OF ARTICLES CONTACTING FOOD
564	910412	FAP 1B4263 POLYETHERSULFONE COPOLYMERS AS ARTICLES OR COMPONENTS OF ARTICLES CONTACTING FOOD
576	910624	FAP 1B4272 METHYL METHACRYLATE/BUTYL ACRYLATE GRAFTED POLYPROPYLENE FOR USE AS A COMPONENT OF POLYPROPYLENE INTENDED FOR USE IN CONTACT WITH FOOD
577	910627	FAP 1B4273 TRICLOSAN IMPREGNATED POLYNATED POLYVINYLCHLORIDE GLOVES FOR HANDLING OF FOOD PRODUCTS INTENDED FOR HUMAN CONSUMPTION
579	910707	FAP 1B4275 4,5 DICHLORO-1,2-DITHIOL-3-ONE AS A SLIMICIDE IN THE MANUFACTURE OF PAPER AND PAPERBOARD CONTACTING FOOD
582	910717	FAP 1B4276 HEVEAFIL REFORMULATED FOOD-GRADE QUALITY RUBBER THREAD USED IN NETTING FOR MEAT PACKAGING
583	910723	FAP 1B4278 ARAIDITE XU GY 376 AS COMPONENTS OF ARTICLES THAT MAY CONTACT FOOD
584	910723	FAP 1B4279 2-BROMO-2-NITRO-1,3-PROPANEDIOL AS COMPONENTS OF ARTICLES IN THE MANUFACTURE OF PAPER AND PAPERBOARD THAT MAY CONTACT FOOD
585	910723	FAP 1B4277 UVASORB HA88 AS LIGHT STABILIZER IN THE MANUFACTURE OF ARTICLES THAT MAY CONTACT FOOD
587	910802	FAP 1B4281 2,2'-ETHYLIDENE BIS(4,6-DI-TERT-BUTYLPHENYL) FLUOROPHOSPHONITE AS ANTIOXIDANT IN POLYMERS USED IN CONTACT WITH FOOD
588	910811	FAP 1B4282 IMADAZOLIUM QUATERNARY AMMONIUM COMPOUND AS WET STRENGTH AGENT IN PAPER TOWELS
594	910904	FAP 1B4287 POLYVINYLIDENE FLUORIDE MICROPOROUS MEMBRANE FILTER WITH HYDROPHILIC SURFACE MODIFIER IN PROCESSING LIQUID FOODS
605	911003	FAP 2B4295 2,4-DI-TERT-PENTYL-6-[1-(3,5-DI-TERT-PENTYL-2-HYDROXYPHENYL)ETHYL] PHENYLACRYLATE AS COMPONENTS OF ARTICLES CONTACTING FOOD

607	911009	FAP 2B4297 N,N-BIS(2-HYDROXYETHYL)ALKYL(C13-C15)AMIDE AS COMPONENTS OF ARTICLES CONTACTING FOOD
614	911030	FAP 2B4301 CITRIC ACID AS SANITIZER INTENDED FOR USE ON CLEAN-IN-PLACE OR OTHER FOOD PROCESSING EQUIPMENT AND UTENSILS
621	911210	FAP 2B4308 N,N-BIS(2-HYDROXYETHYL)DODECANAMIDE AS AN ANTISTATIC AGENT IN POLYPROPYLENE FILM FOR FOOD PACKAGING MATERIALS
629	920108	FAP 2B4312 SINGLE-USE RUBBER THREADS USED IN THE PROCESSING AND PACKAGING OF FOODS, INCLUDING MEAT AND POULTRY
635	920205	FAP 2B4317 HOSTALUX KS AS AN OPTICAL BRIGHTENER FOR POLYMERS USED IN THE FABRICATION OF FOOD-CONTACT ARTICLES
637	920211	FAP 2B4318 COPOLYESTERS OF POLY(ETHYLENE TEREPHTHALATE) WITH UP TO 5 MOLE % (7 WEIGHT %) CYCLOHEXYLENE DIMETHYLENE TEREPHTHALATE AS COMPONENTS OF ARTICLES CONTACTING FOOD
642	920227	FAP 2B4320 2,2'-METHYLENEBIS(4,6-DI-TERT-BUTYLPHENYL)-2-ETHYLHEXYL PHOSPHITE AS ANTI-OXIDANT/AND OR STABILIZER IN ARTICLES CONTACTING
645	920408	FAP 2B4323 FAVOR PAC AS A FLUID ABSORBENT IN PACKAGING OF POULTRY, MEATS AND OTHER FOODS
647	920428	FAP 2B4325 POLYURETHANE ELASTOMER FOR SINGLE USE IN THE PROCESSING AND PACKAGING OF MEATS AND POULTRY PRODUCTS
649	920505	FAP 2B4326 ALKYLATED PHENOLIC POLYAMINE ADDUCT AS COMPONENTS OF ARTICLES CONTACTING FOOD
652	920529	FAP 2B4328 POLY-(TRIMETHYL HEXAMETHYLENE TEREPHTHALAMIDE) AS COMPONENTS OF ARTICLES CONTACTING FOOD
654	920605	FAP 2B4329 DIETHANOLAMINE AS ANTICORROSION AGENT IN PAPER MILL BOILERS
655	920611	FAP 2B4330 BIS(P-ETHYLBENZYLIDENE)SORBITOL AS COMPONENTS OF ARTICLES INTENDED FOR CONTACT WITH FOOD
659	920625	FAP 2B4333 POLYETHERETHERKETONE "PEEK" AS COMPONENTS OF ARTICLES INTENDED FOR FOOD CONTACT USE

660	920707	FAP 2B4334 FOAM ADD 10 AS ANTIMICROBIAL ON FOOD CONTACT SURFACES, FOOD PROCESSING AND UTENSILS
663	920722	FAP 2B4337 RUBBER MODIFIED POLYSTYRENE AND OCTADECYL 3,5-DI-TERT-BUTYL-4-HYDROXYHYDROCINNAMATE AS COMPONENTS OF ARTICLES CONTACTING FOOD
671	920921	FAP 2B4343 BROMOCHLORODIMETHYLDANTION AS ANTIMICROBIAL IN PUBLIC EATING FACILITIES AND FOOD PROCESSING EQUIPMENT
674	920924	FAP 2B4344 POLYHYDRIC ALCOHOL ESTERS AND CALCIUM SALTS OF OXIDATIVELY REFINED MONTANWAX ACIDS AS LUBRICANTS FOR POLYMERS FOR USE IN CONTACT WITH FOOD
675	921001	FAP 3B4346 SILOXANES AND SILICONES AS RESINOUS AND POLYMERIC COATINGS FOR FILMS, PAPER AND PAPERBOARD CONTACTING FOOD
677	921016	FAP 3B4348 EURELON 2141 AS COMPONENTS OF ARTICLES CONTACTING FOOD
678	921026	FAP 3B4349 PYRROLO-3,4-C-PYRROLE-1,4-DIONE,3,6-BIS(-4-CHLOROPHENYL)-2,5-DIHYDRO- AS A COLORANT IN ALL POLYMERS ALLOWED FOR FOOD CONTACT
679	921109	FAP 3B4350 PHOSPHORYLATED TALL OIL FATTY ACIDS AS PIGMENT DISPERSANT IN POLYMERIC FILMS INTENDED FOR USE IN CONTACT WITH FOOD
680	921112	FAP 3B4351 ETHYLENE/MALEIC ANHYDRIDE COPOLYMER AS COMPONENT OF ARTICLES CONTACTING FOOD
682	921117	FAP 3B4353 LODYNE P-208E AS OIL AND WATER REPELLENT FOR PAPER AND PAPERBOARD
684	921202	FAP 3B4354 MALEIC ANHYDRIDE MODIFIED HYDROGENATED STYRENE BUTADIENE BLOCK POLYMER AS COMPONENT OF ARTICLES CONTACTING FOOD
690	921214	FAP 3B4358 3,9-BIS(2-{3-(3-TERT-BUTYL-4-HYDROXY-5-M-ETHYLPHENYL)PROPYLOXY}-1,-DIMETHYLETHYL)-2,4,8,10-TETRAOXASPIRO (5.5) UNDECANE AS COM
692	921223	FAP 3B4360 PERFLUOROALKYLETHYL ACRYLATE COPOLYMER AS OIL AND WATER REPELLENT FOR PAPER AND PAPERBOARD

693	930113	FAP 3B4361 POLYMERS OF 4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYD- RIN RESIN,4,4'-ISOPROPYLIDENEDIPHENOL BIS((2-GLYCIDYLOXY-3-N-BUTOXY)-
695	930122	FAP 3B4363 ALPHA-(DINONYLPHENYL)-OMEGA-HYDROXY-POLY- (OXY-1,2-ETHANEDIYL) HAVING FROM 7 TO 24 MOLES OF ETHYLENE OXIDE PER MOLE OF DINONYLPHE
697	930204	FAP 3B4366 METHYLTIN ISOCTYLMERCAPTOACETATES AS COMPONENTS OF ARTICLES INTENDED FORFOOD CONTACT
699	930208	FAP 3B4367 HYDROXYMETHYL-5,5 DIMETHYLHYDANTOIN AND 1,3-BIS(HYDROXYMETHYL)-5,5-DIMETHYLHYDAN- TOIN AS COMPONENTS OF ARTICLES CONTACTING FOOD
702	930304	FAP 3B4369 NYLON 6/66 COPOLYMER AS COMPONENTS OF ARTICLES INTENDED FOR FOOD CONTACT USE
704	930312	FAP 3B4371 HYDROGEN PEROXIDE, ACETIC ACID, PEROXYACETIC ACID, OCTANOIC ACID, PEROXYOCTANOIC ACID, SODIUM-1-OCTANESULFONATE AND HYDROXYETHYLENE DIPHOSPHONICACID AS
705	930317	FAP 3B4372 NYLON MXD-6 AS COMPONENT OF ARTICLES INTENDED FOR CONTACT WITH FOOD
706	930329	FAP 3B4373 CARBON MONOXIDE-OLEFIN POLYMERS AS COMPONENT OF ARTICLES INTENDED FORFOOD CONTACT USE
707	930330	FAP 3B4374 NYLON 46 (POLYAMIDE 46), A POLYMER TO BE USED IN FILTERS FOR ALCOHOLICBEVERAGE CONTACT
708	930408	FAP 3B4375 PYROMELLITIC DIANHYDRIDE AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
711	930427	FAP 3B4377 HYDROGENATED ACRYLONITRILE BUTADIENE ELASTOMERS AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
712	930429	FAP 3B4378 2-HYDROXY-2-OXA-4,6,10,12-TETRA-TERT-BUT- YL-1,3,2-DIBENZO -D,G- PERHYDRODIOXAPHOSPHOCIN SODIUM SALT AS COMPONENT OF ARTICLES INTE
713	930503	FAP 3B4379 ETHYLENE/HEXENE-1 COPOLYMERS AS ARTICLES OR COMPONENTS OF ARTICLES INTENDED FOR USE IN CONTACT WITH FOOD

- 716 930507 FAP 3B4380 NOXOL AS ANTISCALING AGENT IN THE POLYMERIZATION OF POLYVINYL CHLORIDE(PVC) AND ACRYLIC POLYMERS
- 718 930527 FAP 3B4382 1 BROMO 3-CHLORO-5,5-DIMETHYLHYDANTOIN; 1,3-DICHLORO-5,5-DIMETHYLHYDANTOIN; AND 1,3-DICHLORO-5-ETHYL-5-METHYLHYDANTOIN AS COMPONENTS OF ARTICLES
- 719 930528 FAP 3B4383 1H ISOINDOLE-1,3(2H)-DIONE,4,5,6,7-TETRACHLORO-2-(2--(4,5,6,7-TETRACHLORO-2,3-DIHYDRO-1,3-DIOXO-1H-INDEN-2-YL))-8-QUINOLINYL)-, PIGMENT YELLOW
- 720 930603 FAP 3B4384 HYDROXYPROPYL ACRYLATE AND BUTANEDIOL DIACRYLATE AS COMPONENTS OF ARTICLES INTENDED FOR FOOD CONTACT USE
- 721 930615 FAP 3B4385 BRG (BLOCKED REACTIVE GROUP) STARCH AS SIZING AGENT FOR PAPER AND PAPER-BOARD INTENDED FOR FOOD PACKAGING
- 722 930615 FAP 3B4386 AMMONIUM ZIRCONIUM LACTATE-CITRATE COMPLEXES AS INSOLUBILIZERS FOR BINDERS USED IN CLAY COATINGS FOR PAPER AND PAPERBOARD
- 723 930616 FAP 3B4387 DIDECYL DIMETHYL AMMONIUM CHLORIDE AS PRESERVATIVE ON WOOD THAT ARE USED OR INTENDED FOR USE IN PACKAGING, TRANSPORTING, OR HOLDING OF RAW AGRICULTURAL PRODUCTS
- 725 930623 FAP 3B4389 1,2-BENZISOTHAZOLIN-3-ONE AS COMPONENT OF RUBBER ARTICLES INTENDED FOR FOOD CONTACT USE
- 726 930629 FAP 3B4390 ETHOXYLATED ALCOHOL POLYMERS AS COMPONENTS OF ARTICLES INTENDED FOR FOOD CONTACT USE
- 728 930709 FAP 3B4392 DIDECYL DIMETHYL AMMONIUM CHLORIDE AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
- 731 930729 FAP 3B4394 GAMMA, ELECTRON AND X-RAY RADIATION SOURCES TO PROCESS CORNED BEEF AND SMOKED TURKEY FOR USE IN SPACE FLIGHT PROGRAMS
- 732 930803 FAP 3B4395 DI-TERT-BUTYLPHENYL PHOSPHONITE, BIPHENYL CONDENSATE, SANDOSTAB P-EPQ, AS AN ANTIOXIDANT/STABILIZER FOR POLYMERS, RUBBERS
- 733 930806 FAP 3B4396 DIMETHYLPOLYSILOXANE, 100 AND 50 CENTISTOKES, AS A RELEASING AGENT FOR THERMOPLASTIC ELASTOMERS

734	930813	FAP 3B4398 IRGAFOS 12 AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
735	930813	FAP 3M4399 PULSED FAST NEUTRON ANALYSIS (PFNA) CONTAINER INSPECTION ON SHIPMENTS CONTAINING FOOD
736	930813	FAP 3B4397 DIOCTADECYLDISULFIDE
738	930909	FAP 3B4400 PENTAERYTHRITOL STEARATE AS COMPONENT OF ARTICLES INTENDED FOR FOOD CON- TACT USE
739	930909	FAP 3B4401 META-TETRAMETHYLYLENE DIISOCYANATE AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
744	931001	FAP 4B4405 DECYLISONONYLDIMETHYL AMMONIUM CHLORIDE AS COMPONENT OF ARTICLES INTEN-DED FOR FOOD CONTACT USE
748	931122	FAP 4M4407 PETITION TO PERMIT USE OF 10 MEV MACHINE PRODUCED X-RADIATION FOR INSPECTION OF CARGO CONTAINERS WHICH MAY CONTAIN FOOD
751	931207	FAP 4B4410 OXIDIZED BIS(HYDROGENATED TALLOW ALKYL) AMINES AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
754	940105	FAP 4B4411 HYDROGENATED CYCLODIENE RESINS AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
760	940209	FAP 4B4416 FISCHER-TROPSCH SYNTHETIC PARAFFIN WAX AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
761	940228	FAP 4M4417 USE OF PULSED LIGHT IN THE CONTROL OF BACTERIA, MOLDS, YEASTS AND OTHER MICROORGANISMS ON FOOD PRODUCTS
762	940322	FAP 4B4418 BROMOCHLORODIMETHYLHYDANTOIN AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
766	940520	FAP 4B4421 ETHYLENE-VINYL ACETATE-VINYL ALCOHOL COPOLYMERS FOR USE AS ARTICLES OR COMPONENTS OF ARTICLES INTENDED FOR CONTACT WITH FOOD
768	940524	FAP 4B4424 12H-PHTHALOPEPIN-12-ONE, 8,9,10,11-TETRACHLORO AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
769	940524	FAP 4B4423 9,10-ANTHRACENEDIONE, 1,4-BIS((2,4,6-TRIMETHYLPHENYL)AMINO) AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE

772	940531	FAP 4B4425 ZINC PYRITHIONE AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
774	940602	FAP 4B4426 USE OF COPOLYMER OF ACRYLIC ACID AND POLYETHYLENEGLYCOL ALLYL ETHER AS ANTICORROSION AGENT IN PAPERMILLS BOILER
775	940622	FAP 4B4427 ETHYLENE-1,4 CYCLOHEXYLENEDIMETHYLENE COPOLYMERS, TO INCLUDE COPOLYESTERSWITH 1 TO 100 MOLE % OF REPEAT UNITS DERIVED FROM 1,4-CYCLOHEXYLENEDIME- THYLENE
779	940707	FAP 4M4428 APPROVED SOURCES OF IONIZING RADIATION FOR THE TREATMENT OF FRESH AND FROZEN RAW EDIBLE TISSUE OF DOMESTICATED MAMMALIAN HUMAN FOOD SOURCES TO HELP CONTROL ILLNESS
782	940822	FAP 4B4430 METHYL TIN-2-MERCAPTOETHYLOLEATE SULFIDE HEAT STABILIZERS FOR USE IN PVC PIPE IN FOOD PROCESSING PLANTS
783	940826	FAP 4B4431 USE OF 1,4-CYCLOHEXANEDICARBOXYLIC ACID AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
784	940826	FAP 4B4432 POLYLACTIDE HOMOPOLYMER AND COPOLYMER (LACTIDE/CAPROLACTONE) AS COMPONENT S OF ARTICLES INTENDED FOR FOOD CONTACT USE
786	940928	FAP 4B4434 BIS(2,6-DI-TERT-BUTYL-4-METHYLPHENYL) ESTER AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
787	940930	FAP 4B4435 GLYCERYL POLYOXYPROPYLENE TRIOL AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
789	941024	FAP 5M4438 X RADIATION FOR INSPECTION OF VEHICLES, CARGO CONTAINERS, FREIGHT, PARCELS OR BAGGAGE THAT MAY INCIDENTALLY CONTAIN FOOD
790	941024	FAP 5B4437 DIISOPROPYL XANTHOGEN POLYSULPHIDE (DIXT) AS VULCANIZING AGENT FOR USE IN RUBBER ARTICLES WHICH MAY CONTACT FOOD
793	941115	FAP 5B4441 CI PIGMENT YELLOW 191 AS A COLORANT FOR ALL POLYMERS
794	941123	FAP 5B4442 TITANIUM DIOXIDE/SILVER CHLORIDE AS COMPONENTS OF ARTICLES INTENDED FOR FOOD CONTACT USE

795	941128	FAP 5B4443 2-TERT-BUTYL-6-(3-TERT-BUTYL-2-HYDROXY-5-METHYLBENZYL)-4-METHYLPHENYL ACRYLATE AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT
796	941128	FAP 5B4444 ETHYLENE TEREPHTHALATE-ISOPHTHALATE COPOLYMER WITH PYROMELLITIC DIANHYDRIDE AS COMPONENTS OF ARTICLES INTENDED FOR FOOD CONTACT USE
797	941130	FAP 5B4445 TRITON N-101 AS COMPONENT OF ARTICLES THAT MAY CONTACT FOOD
798	941206	FAP 5B4446 COPPER CHROMITE BLACK SPINEL AS A COLORANT IN ALL POLYMERS
799	941219	FAP 5B4448 HYDROGENATED STYRENE BLOCK COPOLYMER WITH 2-METHYL-1,3-BUTADIENE AND 1,3-BUTADIENE FOR USE IN CONTACT WITH FOOD
801	950110	FAP 5B4450 USE OF POLY(ETHYLENE TEREPHTHALATE 2,6-NAPHTHALATE AS COMPONENTS OF ARTICLES INTENDED FOR FOOD CONTACT USE
802	950110	FAP 5B4451 POLY(ETHYLENE 2,6-NAPHTHALATE) AND POLY(ETHYLENE 2,6-NAPHTHALATE) MODIFIED WITH ETHYLENE TEREPHTHALATE AS COMPONENTS OF ARTICLES INTENDED FOR FOODCONTACT USE
803	950117	FAP 5B4452 USE OF POLYAMIDE-ETHYLENEIMINE-EPICHLOROHYDRIN RESIN AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
804	950124	FAP 5B4453 TITANIUM DIOXIDE/SILVER CHLORIDE AS COMPONENTS OF ARTICLES INTENDED FOR FOOD CONTACT USE

ATTACHMENT 2

DIRECT ADDITIVE PETITIONS PENDING

** PRIVATE **	MATS PROJECT SUMMARY STATUS REPORT	95-03-03
#	TITLE	
47	870415	FAP 7A3997 OLESTRA FOR USE AS A CALORIE FREE REPLACEMENT FOR FATS AND OILS
66	791010	FAP 0A3481 METHYLENE CHLORIDE AS A SOLVENT FOR DECAFEINATING TEA
69	710326	FAP 1A2671 SODIUM NITRITE IN WHITE FISH
85	840816	FAP 4A3824 POLYSORBATE 60 (TWEEN 60) AS AN EMULSIFIER IN COCONUT MILK DRINK

100	780627	FAP 8Z3421 REVOCATION OF THE FOOD ADDITIVE REGULATION FOR XYLITOL
147	840801	FAP 4A3817 FERMCAP FOR USE AS A DEFOAMING AGENT IN BEER
151	860407	GRP 6G0315 L-CYSTEINE HYDROCHLORIDE MONOHYDRATE AS A SURFACE-FINISHING AGENT IN FRESH FRUITS AND VEGETABLES
155	820922	FAP 2A3672 CYCLAMATE (CYCLAMIC ACID, CALCIUM CYCLAMATE, AND SODIUM CYCLAMATE)
203	831230	FAP 4A3774 POLYSORBATE 60 AS A EMULSIFIER IN ICE CREAM, FROZEN CUSTARD, ICE MILK, FRUIT SHERBET AND NON-STANDARDIZED FROZEN DESSERT
204	840514	FAP 4A3806 BETZ 1180 AS A FIXING AGENT IN GLUCOSE ISOMERASE ENZYME DERIVED FROM STREPTOMYCES OLIVACEUS (FORMERLY GRP 2G0281)
218	860312	FAP 6A3930 MYCOPROTEIN (MYCELIUM FUSARIUM GRAMINEARUM) AS A NUTRIENT SUPPLEMENT INFROZEN ENTREES
220	860804	FAP 6A3958 ALITAME AS A NUTRITIVE SWEETENER AND/OR FLAVORING AGENT IN VARIOUS FOODS
233	860103	FAP 6Z3910 SACCHARIN AS A NUTRITIVE SWEETENER IN CARBONATED SOFT DRINKS
234	860502	FAP 6Z3936 PETITION FOR A REGULATION RECOGNIZING THE EXISTENCE OF A PRIOR SANCTION FOR SPECIAL DIETARY USE OF SACCHARIN AND SALTS
235	860805	FAP 6Z3960 PRIOR SANCTION FOR THE USE OF SULFUR DIOXIDE AND SPECIFIED SULFITES AS ANTIOXIDANTS IN BEER AND MALT BEVERAGES
236	761228	FAP 7A3329 EPOXIDIZED SOYBEAN OIL AS A HALOGEN STABILIZER AT A LEVEL OF 1% IN BROMINATED SOYBEAN OIL
251	870109	FAP 7Z3984 PETITION REQUESTING A REGULATION RECOGNIZING THE EXISTENCE OF A PRIOR SANCTION FOR BHT AS AN ANTIOXIDANT
252	870227	FAP 7Z3989 BUTYLATED HYDROXYANISOLE (BHA)-PETITION TO RECOGNIZE THE PRIOR SANCTION FOR USE AS AN ANTIOXIDANT
295	870209	FAP 7A3987 SUCRALOSE AS A NON-NUTRITIVE SWEETENER IN VARIOUS FOODS
386	890419	FAP 9A4148 KOJIC ACID AS AN ANTIMICROBIAL AGENT IN FRESH SEAFOOD AND FRESH VEGETABLES; SEIWA LABORATORIES

402	890705	FAP 9A4155 GLYCERIDES AND POLYGLYCERIDES OF FATTY ACIDS OF VEGETABLE ORIGIN FOR USEAS EXCIPIENTS IN VITAMIN TABLETS AND LIQUID FORMULATIONS
417	890817	FAP 9A4166 SUCROSE FATTY ACID ESTERS AS EMULSIFIERS, STABILIZERS AND TEXTURIZERS INCHEWING GUM AND CONFECTIONS AND FROSTINGS
438	890925	FAP 9A4175 DIMETHYLAMINE-EPICHLOROHYDRIN AND ACRYLAMIDE ACRYLIC ACID_RESIN AS FIXING AGENTS FOR IMMBILIZED GLUCOSE ISOMERASE USED IN FOODS
442	891101	FAP 0A4183 SUCROSE FATTY ACID ESTERS FOR USB AS TEXTURIZERS IN SURIMI-BASED FAHRICA-TED SEAFOOD PRODUCTS
474	900314	FAP 0A4200 HETA GLUCAN - DOUGH STRENGTHENER FORMULATION AND PROCESSING AIDS STABILIZERS AND THICKENERS (REF. FAP 7A3288)
487	900607	FAP 0A4212 ACESULFAME POTASSIUM AS A NON-NUTRITIVE SWEETENER IN NON-ALCOHOLICBEVERAGES
490	900622	FAP 0A4216 AMEND FDA REGULATIONS TO PROHIBIT USE OF BUTYLATED HYDROXYANISOLE (BHA)
505	900817	GRP 0G0368 ETHANOL AS ANTIOXIDANT IN THE GROWTH OF YEAST IN FERMENTED SOY SAUCE
510	900920	FAP 0A4226 USE OF POLYMALEIC ACID AND ITS SODIUM SALT TO CONTROL MINERAL SCALE INBEET AND CANE SUGARJUICE
552	910130	FAP 1A4255 DISODIUM EDTA, POLYSORBATE 80 AND SODIUM LAURYL SULFATE FOR WASHING FRUITS AND VEGETABLES
558	910325	FAP 1A4258 POLYDEXTROSE AS A FORMULATION AID IN FILM COATING APPLIED TO VITAMIN ANDMINERAL SUPPLEMENT TABLETS
565	910430	FAP 1A4264 CARREGEENAN (TO AMEND 172.620(A) AND (B)
566	910430	FAP 1A4265 PROCESSED EUCHEMA SEAWEEED AS EMULSIPIER, STABILIZER OR THICKENER IN FOODS
569	910506	FAP 1A4266 SUCROSE ACETATE ISOBUTYRATE (SAIB) AS STABILIZER OF EMULSIONS OF FLAVO- RING OILS USED IN NON-ALCOHOLIC CARBONATED AND NON-CARBONATED BEVERAGES
570	910520	FAP 124268 EUCHEMA SEAWEEED

597	910913	FAP 1A4288 PERIODIC ACID AND POLYETHYLENEIMINE AS FIXING AGENTS FO IMMOBILIZINGGLUCOAMYLASE ENZYME
643	920324	FAP 2A4321 SUCROSE FATTY ACID ESTERS AS EMULSIFIERS IN COFFEE AND TEA BEVERAGES
658	920625	FAP 2A4332 POLYDEXTROSE AS A TEXTURIZER IN TABLESPREADS
662	920716	FAP 2A4336 GLYCERIN EXTRACT OF DRIED GRAPEFRUIT SEEDS AND PULP AS ANTIMICROBIAL AGENT IN THE PROCESSING OF FRESH OR FROZEN POULTRY, FISH AND SHELLFISH
666	920812	FAP 2A4340 ETHYL ESTERS OF FATTY ACIDS, SULFATED BUTYL OLEATE AND SULFATED ETHYL OLEATE TO BE USED IN DEHYDRATING BEANS, GRAPES, RAISINS AND CEREALS
674	920924	FAP 2A4345 ALPHA-ACETOLACTATE DECARBOXYLASE FROM BACILLUS SUBTILIS AS PROCESSING AID IN THE BREWING PROCESS AND IN THE FERMENTATION STEP IN THE PRODUCTION OF ALCOHOL
727	930630	FAP 3A4391 ACESULFAME POTASSIUM AS A NON-NUTRITIVE SWEETENER IN CERTAIN ALCOHOLICBEVERAGES
742	930923	FAP 3A4404 CALCIUM DISODIUM EDTA AS A COLOR RETAINER IN FAVA BEANS
747	931008	FAP 4A4406 ASPARTIC PROTEINASE (MILK-CLOTTING ENZYME) AS A PROCESSING AID IN THEPRODUCTION OF CHEESE
749	931110	FAP 4A4408 USE OF CHLORINE DIOXIDE TO DISINFECT WATER CONTACTING POULTRY AND MEAT
750	931201	FAP 4A4409 USE OF SHARK LIVER OIL AS A DIETARY SUPPLEMENT
756	940104	FAP 4A4412 USE OF MANNITOL PRODUCED BY FERMENTATION USING ZYGOSACCHAROMYCES ROUXII
759	940204	FAP 4A4415 THE USE OF CHLORINE DIOXIDE TO DISINFECT WATER IN CONTACT WITH FRUITS ANDVEGETABLES
763	940408	FAP 4A4419 N-OCTANOL, A CURRENTLY CLEARED SYNTHETIC FATTY ALCOHOL PRODUCED BY A NEW MANUFACTURING PROCESS, FOR USE AS AN INGREDIENT IN FOOD
764	940429	FAP 4A4420 DIMETHYL DICARBONATE AS A YEAST INHIBITOR IN SPORTS DRINKS AND FRUIT OR JUICE SPARKLERS

767	940524	FAP 4A4422 USE OF STALEY FORMULATION OF POLYDEXTROSE AS BULKING AGENT, FORMULATION AID, HUMECTANT AND TEXTURIZER
781	940801	FAP 4A4429 USE OF SHIVON H2O FOR DRINKING WATER
785	940914	FAP 4A4433 ACIDIFIED SOLUTIONS OF SODIUM CHLORITE/CHLOROUS ACID AS ANTIMICROBIAL AGENT ON POULTRY SURFACES DURING PROCESSING
788	941005	FAP 5A4436 PETITION TO MODIFY 21 CFR 173.340 BY CHANGING THE POLYPROPYLENE GLYCOL PERMITTED MOLECULAR WEIGHT RANGE
791	941028	FAP 5A4439 PETITION TO AMEND 21 CFR 172.804 TO CLARIFY AND SIMPLIFY THE ASPARTAME REGULATION
792	941115	FAP 5A4440 WHITE MINERAL OIL, USP AS A DUST CONTROL AGENT FOR WHOLE, UNHULLED (ROUGH) RICE
800	950109	FAP 5A4449 USE OF OZONE AS ANTIMICROBIAL AGENT IN ALL PERISHABLE FOODS IN COLD STORAGE AND ALL PHASES OF FOOD PREPARATION

d. Number of indirect food additive petitions approved.

The number of petitions approved is different from the number acted on, because some petitions are acted on without approval (they may be denied, dropped or withdrawn by the petitioner).

	<u>Approved</u>	<u>Others acted on</u>
FY 94	36	4
FY 95*	4	1
*(through 3/3/95)		

e. Number of direct food additive petitions approved.

	<u>Approved</u>	<u>Others acted on</u>
FY 94	9	3
FY 95*	4	0
*(through 3/3/95)		

f. For each petition which was approved, the date on which it was first submitted to the FDA and the date of approval.

The information requested is in Attachment 3 (indirect additive petitions) and Attachment 4 (direct additive petitions) which follow:

INDIRECT ADDITIVE PETITIONS APPROVED

Status Key

F = Filed
 C = Complete
 W = Withdrawn
 * = Completed After Due Date
 K = Dropped

** PRIVATE **		MATS PROJECT SUMMARY STATUS REPORT		95-03-03
#	DATEREC	DATEDONE	STATUS	TITLE
343	880512	940309	C	FAP 884091 ETHYLENE-OCTENE-1 COPOLYMERS AS ARTICLES OR COMPONENTS OF ARTICLES FOR USE IN CONTACT WITH FOOD
359	881209	940407	C	FAP 984123 PERFLUORINATED IONOMER MEMBRANE CONTACTING LIQUID FOODS
404	890707	940302	* C	FAP 984157 1,3,5 BENZENETRICARBONYL TRICHLORIDE POLYMER WITH PIPERAZINE AND 1,2-DIAMINOETHANE AS A POLYMER MEMBRANE
410	680418	931221	C	FAP 882288 COLORANTS FOR UREA FORMALDEHYDE RESINS IN MOLDED ARTICLES; AMEND 121.2595
411	650913	931221	C	FAP 681862 CARBON BLACKS (CHANNEL BLACKS & FURNACE BLACKS) FOR COLORING POLYMERIC FOOD PACKAGING
412	700330	931221	C	FAP 082534 RED FERRIC OXIDE, CHANNEL BLACK, AND PHTHALOCYANINE BLUE IN POLYVINYLIDENE FLUORIDE
413	700130	931221	C	FAP 082512 COLORANTS IN POLYETHYLENE SALT CONTAINERS
414	710126	931221	C	FAP 182641 COLORANTS IN POLYOLEFINS
426	890911	940628	C	FAP 984171 POLYALKYL (C1) HYDROGENSILLOXANE ALKENE (C10-C50) AND PROPYLENE ADDITIONPRODUCT AS A MODIFIER/ANTIFOAMING AGENT IN POLYOLFIN COATING FOR PAPER AND PAPERBOARD
427	890913	940921	C	FAP 984172 ALKYL METHOXYLATED 1,3,5-TRIAZINE-2,4,6-TRIAMINE POLYMER (EMIT) AS WATER REPELLANT COATING FOR PAPER AND PAPERBOARD
449	891128	940906	* C	FAP 084188 BORIC ACID AS A COLOR STABILIZER IN ETHYLENE-VINYL ACETATE-VINYL ALCOHOL COPOLYMERS

458	900105	931115	C	FAP 0B4193 POLYAMIDE-ETHYLENEIMINE-EPICHLOROHYDRIN WATER SOLUBLE RESINS AS COMPONENTS OF ARTICLES CONTACTING FOOD
489	900622	931006	C	FAP 0B4215 DIMETHYLAMINE-EPICHLOROHYDRIN COPOLYMER FOR USE IN THE MANUFACTURE OF PAPER AND PAPERBOARD CONTACTING FOOD
500	900726	940119	C	FAP 0B4222 3,5-DI-TERT-BUTYL-4-HYDROXYHYDRO CINNAMIC ACID TRIESTER WITH 1,3,5-TRIS(2-HYDROXYETHYL)-S TRIAZINE 2, 4,6(1H,3H,5H)-TRIONE, AS
514	900925	931215	C	FAP 0B4231 STYRENE BLOCK POLYMER WITH 1,3-BUTADIENE, HYDROGENATED AS COMPONENTS OF ARTICLES CONTACTING FOOD
528	901115	940303	C	FAP 1B4240 2,2'-((2-ETHENEDIYL)DI-4,1-PHENYLENE) BIS(BENZOXAZOLE) AS OPTICAL BRIGHTENER FOR POLYMERS USED IN FOOD CONTACT APPLICATIONS
535	901221	931026	C	FAP 1B4245 DIVOSAN MH, IODINE SANITIZER FOR USE ON FOOD CONTACT SURFACES
571	910520	940520	C	FAP 1B4267 HYDROGENATED CYCLODIENE RESINS AS COMPONENTS OF ARTICLES CONTACTING FOOD
591	910821	940914	C	FAP 1B4285 IRGACURE 261 AS A PHOTOINITIATOR IN ADHESIVES
592	910827	940628	C	FAP 1B4286 N-PHENYLBENZENAMINE, REACTION PRODUCTS WITH 2,4,4-TRIMETHYLPENTENE, IRGANOX 5057 AS A STABILIZER IN ADHESIVES
606	911004	940303	C	FAP 2B4296 COBALT ALUMINATE AS A COLORANT IN ALL POLYMERS
611	911016	940907	C	FAP 2B4299 HYDROGENATED BUTADIENE-ACRYLONITRILE COPOLYMERS AS COMPONENTS OF ARTICLES CONTACTING FOOD
612	911016	940516	C	FAP 2B4300 2-HYDROXY-2- OXA 4,6,10,12 TETRA-TERT-BUT- YL-1,3,2-DIBENZO(D,G) PERHYDRODI-OXAPHOPHOROCIN, SODIUM SALT AS CLARIFYING AGENT IN ART
617	911113	931210	C	FAP 2B4303 1,1 DIFLUOROETHANE AS A BLOWING AGENT IN THE PRODUCTION OF ARTICLES CONTACTING FOOD
632	920117	940114	* C	FAP 2B4315 HYDROGENATED AROMATIC PETROLEUM HYDROCARBON RESIN AS COMPONENTS OF ARTICLES CONTACTING FOOD

634	920128	940224	C	FAP 2B4316 1,1,1-TRIMETHYLOLPROPANE (TMP) AS PIGMENT DISPERSANT INTENDED FOR FOOD CONTACT USE
664	920727	940825	C	FAP 2B4338 HYDROGENATED AROMATIC PETROLEUM HYDROCARBON RESIN FOR USE IN BLENDS WITHPOLYPROPYLENE INTENDED FOR CONTACT WITH FOOD
668	920909	940323	C	FAP 2B4341 DIMETHYLDIBENZYLIDENE SORBITOL AS COMPONENTS OF ARTICLES INTENDED FORFOOD CONTACT USE
681	921112	931026	C	FAP 3B4352 CORRECTION OF THE IDENTIFICATION OF THE SUBSTANCE AS IS CURRENTLY IN THE CODE OF FEDERAL REGULATIONS, 21 CFR 178.3130 (B)
689	921214	940224	C	FAP 3B4357 2,4-TERT-PENTYL-6-{1-(3,5-DI-TERT-PENTYL-2-HYDROXYPHENYL) ETHYL} PHENYL ACRYLATE
691	921214	940224	C	FAP 3B4359 2,4-DI-TERT-PENTYL-6{1-(3,5-DI-TERT-PENTYL-2-HYDROXYPHENYL)ETHYL}PHENYL ACRYLATE
694	930114	940209	C	FAP 3B4362 COPOLYMER OF METHYLMETHACRYLATE AND TRIMETHOXSILYLPROPYLMETHACRYLATE ASCOMPONENTS OF ARTICLES CONTACTING FOOD
703	930304	931117	C	FAP 3B4370 DIPENTAMETHYLENETHIURAM HEXASULFIDE AS AN ACCELERATOR FOR RUBBER ARTICLESINTENDED FOR REPEATED USE
729	930720	940208	C	FAP 3B4393 C1 PIGMENT YELLOW 181 AS COLORANT IN ALL POLYMERS
740	930921	940126	C	FAP 3B4402 C 1. PIGMENT RED 187 AS A COLORANT FOR ALL POLYMERS
757	940107	940824	C	FAP 4B4413 P-CUMYLPHENOL AS COMPONENT OF ARTICLES INTENDED FOR FOOD CONTACT USE
324	870723	941212	C	FAP 7B4017 HIGH MOLECULAR WEIGHT LINEAR SATURATED POLYESTER FOR USE IN COATING ALUMINIUM CONTAINERS OF ALCOHOLIC FOODS
521	901022	941205	* C	FAP 1B4236 ETHYLENE/1,3-PHENYLENE OXYETHYLENE ISOPHTHALATE/TEREPHTHALATE COPOLYMERAS COMPONENTS OF ARTICLES CONTACTING FOOD
578	910628	950215	C	FAP 1B4274 ANOXSYN 442 AS AN ANTIOXIDANT IN THE MANUFACTURE OF POLYMERIC FOOD CONTACT MATERIALS
589	910813	941205	* C	FAP 1B4283 2-ETHYL 4-6-BIS{(OCTYLTHIO) METHYL} PHENOL, (IRGANOX 1520) AS A STABILIZER FOR STYRENIC POLYMERS AND TACKIFIERS

ATTACHMENT 4

DIRECT ADDITIVE PETITIONS APPROVED

Status Key

F = Filed
 C = Complete
 W = Withdrawn
 * = Completed After Due Date
 K = Dropped

** PRIVATE **		MATS PROJECT SUMMARY STATUS REPORT			95-03-03
#	DATE REC	DATEDONE	STATUS	TITLE	
2	880203	940722	C	FAP 8A4068 POLYDEXTROSE AS A BULKING AGENT/TEXTURIZER IN FRUIT SPREADS	
239	870417	940722	C	FAP 7A3998 POLYDEXTROSE AS A BULKING AGENT/TEXTURIZER IN PEANUT SPREAD	
292	850111	940309	* C	FAP 5A3849 SYNTHETIC PETROLEUM WAX AS A FORMULATION AID IN FOODS AND AS A POLYMERIZATION CONTROL AGENT IN FOOD PACKAGINGS	
364	881228	940722	C	FAP 9A4126 POLYDEXTROSE AS A BULKING AGENT/TEXTURIZER IN SWEET SAUCES, TOPPINGS AND SYRUPS	
517	841105	940804	C	FAP 5A3839 SUCROSE FATTY ACID ESTERS AS SURFACTANTS IN FRUIT COATINGS AND AS EMULSIFIERS, STABILIZERS AND TEXTURIZERS IN FOODS	
626	911226	940204	C	FAP 2A4310 DIMETHYL DICARBONATE (VELCORIN) FOR USE IN READY-TO-DRINK TEA BEVERAGES	
676	921016	931007	* C	FAP 3A4347 CALCIUM DISODIUM EDTA AS COLOR FIXATIVE FOR USE IN COOKED, CANNED BEANS	
696	930122	940523	C	FAP 3A4364 AMINOGLYCOSIDE 3'-PHOSPHOTRANSFERASE II AS PROCESSING AID IN THE PRODUCTION OF GENETICALLY ENGINEERED TOMATOES, COTTON AND OILSEED RAPE (REFER TO FMP 000528)	
743	930923	940513	C	FAP 3A4403 GLYCERYL TRISTEARATE (REQUESTING THAT CFR 21, PART 172.811(B) BE AMENDED)	
508	900911	941201	C	FAP 0A4225 ACESULFAME POTASSIUM AS A NON-NUTRITIVE SWEETENER IN BAKED GOODS	
625	911226	941201	C	FAP 2A4309 ACESULFAME POTASSIUM FOR BULK INGREDIENT USE IN THE HOME AS A NON-NUTRITIVE SUBSTITUTE FOR SUGAR	

628	920108	941201	C	FAP 2A4111 ACESULFAME POTASSIUM FOR USE AS A NON-NUTRITIVE SWEETENER IN YOGURT AND YOGURT TYPE PRODUCTS, AND IN FROZEN AND REFRIGERATED DESSERTS
631	920110	941201	C	FAP 2A4314 ACESULFAME POTASSIUM AS A SWEETENER IN SYRUPS

g. Number of pending GRAS petitions, broken down by those that were FDA-initiated and those petitions initiated by private persons.

FDA-initiated GRAS petitions	51
Initiated by private persons	73

h. Number of GRAS petitions acted on.

Information pertaining to petitions submitted by private persons is provided. We do not have readily retrievable data on numbers of GRAS petitions acted upon before about FY 90. We are providing information from October 1, 1989 to the present.

The number of petitions acted on is different from the number of petitions that resulted in a GRAS affirmation.

GRAS petitions acted upon	40
GRAS affirmations	9

i. For each GRAS petition, whether it is still pending or was acted on in the period between 1984 and 1994, and the date on which the petition was submitted to the FDA.

The pending GRAS petitions, the GRAS petitions acted on in the since October 1, 1989, and the GRAS affirmations are in Attachment 5, Attachment 6, and Attachment 7 which follow:

ATTACHMENT 5

PENDING GRAS PETITIONS

** PRIVATE **	MATS PROJECT SUMMARY STATUS REPORT	95-03-03
# DATEREC	TITLE	
19 880629	GRP 8G0343 SHEA NUT OIL	
18 880801	GRP 8G0344 GLYCERYL PALMITOSTEARATE	
151 860407	GRP 6G0315 L-CYSTEINE HYDROCHLORIDE MONOHYDRATE AS A SURFACE-FINISHING AGENT IN FRESH FRUITS AND VEGETABLES	
152 730125	GRP 3G0020 CHLORINE DIOXIDE FOR THE TREATMENT OF POTABLE WATER FOR WASHING FRUITS AND VEGETABLES	

179	801110	GRP 1G0270 SILICA GEL FOR USE AS A FLAVOR CARRIER
180	801209	GRP 1G0273 IMMOBILIZED LACTASE COMPOSITE FOR USE IN THE HYDROLYSIS OF LACTOSE IN WHEY PERMEATE
181	830518	GRP 3G0284 ALPHA-AMYLASE DERIVED FROM BACILLUS STEAROTHERMOPHILUS TO BE USED IN THE PRODUCTION OF SWEETENERS
255	800508	GRP 0G0280 GLUTARALDEHYDE-CROSSLINKING AGENT IN MANUFACTURE OF EDIBLE COLLAGEN SAUSAGE CASINGS (FORMERLY FAP 1A3566 AND GRP 0G0267)
256	820922	GRP 2G0282 LACTASE DERIVED FROM CANDIDA PSEUDOTROPICALIS
257	720831	GRP 3G0016 GRAS REVIEW OF CERTAIN ENZYMES
258	830128	GRP 3G0283 IMMOBILIZED GLUCOSE ISOMERASE DERIVED FROM FLAVOBACTERIUM ARBORESCENS USED TO PRODUCE HIGH FRUCTOSE CORN SYRUP
259	830804	GRP 3G0287 PETITION TO AMEND 21 CFR 184.1330 TO INCREASE THE LEVEL OF USE OF GUM ARABIC IN ALCOHOLIC BEVERAGES
260	840712	GRP 4G0293 AFFIRMATION OF GRAS STATUS OF ALPHA-AMYLASE ENZYME DERIVED FROM BACILLUS SUBTILIS
261	840810	GRP 4G0294 GRAS AFFIRMATION OF MAGNESIUM ALGINATE AS A STABILIZER, THICKENER, AND GELLING AGENT IN FOODS
262	840919	GRP 4G0295 GRAS AFFIRMATION OF PULLANASE ENZYME DERIVED FROM BACILLUS ACIDOPULLULYTICUS
263	841203	GRP 5G0297 MIXED CARBOHYDRASE ENZYME DERIVED FROM ASPERGILLUS ACULEATUS
265	850425	GRP 5G0301 ENZYME-MODIFIED LECITHIN
266	850729	GRP 5G0304 HYDROGENATED STARCH HYDROLYSATE AS A FLAVORING AGENT IN CANDY AND BAKED GOODS
267	860210	GRP 6G0309 GLUCOSE ISOMERASE ENZYME DERIVED FROM STREPTOMYCES MURINUS
270	860811	GRP 6G0318 CROSS-LINKED POLYESTER CONTAINERS FOR PACKAGING AND REHEATING OF PRECOOKED FROZEN FOODS
271	860902	GRP 6G0319 MALITITOL
272	860918	GRP 6G0321 ISOMALT (PALATINIT) FOR USE AS A NUTRITIVE SWEETENER

275	861113	GRP 7G0323 IMMOBILIZED ESTERASE/LIPASE ENZYME PREPARATION DERIVED FROM MUCOR MEIHEI
276	861212	GRP 7G0326 ALPHA AMYLASE DERIVED FROM BACILLUS SUBTILIS CONTAINING GENECODING FROM BACILLUS STEAROTHERMOPHILUS AMYLASE
278	861218	GRP 7G0328 ALPHA AMYLASE OF BACILLUS MEGATERIUM DERIVED FROM BACILLUS SUBTILIS ENZYME PREPARATION
279	870306	GRP 7G0330 LIPASE-PROTEASE ENZYME PREPARATION DERIVED FROM NON-PATHOGENIC AND NON-TOXICOGENIC STRAINS OF RHIZOPUS NIVEUS
280	790711	GRP 9G0260 CELLULASE ENZYME FROM TRICHODERMA RESEI
284	871106	GRP 8G0335 AMINOPEPTIDASE DERIVED FROM LACTOCOCCUS LACTIS FOR USE IN THE MANUFACTURE OF CHEESE
318	830802	GRP 3G0286 HYDROGENATED GLUCOSE SYRUP (LYCASN 80/55) FOR USED IN CANDY, CHEWING GUM AND CONFECTIONS
322	870904	GRP 7G0332 1,3 BUTYLENE GLYCOL FOR USE AS FORMULATION AND PROCESSING AIDS IN SAUSAGE CASINGS
339	880217	GRP 8G0339 SORBITAN TRISTEARATE (STS) AS A CRYSTAL STABILIZER IN CONFECTIONS AND FROSTINGS
340	880223	GRP 8G0340 CHLORODIFLUOROMETHANE (CDFM) AS AN ADJUVANT IN THE PRODUCTION OF FOAMED POLYSTYRENE FOOD CONTAINERS
353	880929	GRP 8G0348 SAFFLOWER OIL AND SUNFLOWER OIL AS INGREDIENTS IN COCOA BUTTER SUBSTITUTES
400	890629	GRP 9G0353 MALTODEXTRIN DERIVED FROM POTATOES AS A FILLER, CARRIER OR TEXTURIZER INFOODS
420	890821	GRP 9G0355 LYSOZYME AS AN ANTIMICROBIAL AGENT IN CHEESE PRODUCTION
441	891027	GRP 0G0357 PSYLLIUM SEED HUSK GUM AS A BREAKFAST CEREAL
447	891124	GRP 0G0359 MUSTARD SEED OIL FOR USE IN COOKING AND IN SALADS
459	740111	GRP 5G0047 MAGNESIUM CASEINATE FOR USE AS AN EXTENDER (SUBSTITUTE) FOR CHEESE

466	900227	GRP 0G0363 ALPHA-AMYLASE DERIVED FROM BACILLUS LICHENIFORMIS CONTAINING THE ALPHA-AMYLASE GENE FROM BACILLUS STEAROTHERMOPHILUS
491	900622	GRP 0G0366 GRAS AFFIRMATION PETITION (AMENDING 21CFR 184.1498)
492	900622	GRP 0G0365 REQUESTS GRAS AFFIRMATION FOR CROSS-LINKED PHENOL-FORMALDEHYDE RESIN WITH TRIETHYLENETETRAMINE
505	900817	GRP 0G0368 ETHANOL AS ANTIOXIDANT IN THE GROWTH OF YEAST IN FERMENTED SOY SAUCE
526	901115	GRP 1G0370 ALGINIC ACID AS PH CONTROL AGENT IN SEVERAL TYPES OF FOOD
527	901114	GRP 1G0369 SOYBEAN OLIGOSACCHARIDE SYRUP FOR USE IN MULTIPURPOSE FOODS
530	860613	GRP 6G0316 REFINED MENHADEN OIL (SEE PROJECT 44 PARTIALLY HYDROGENATED MENHADEN OIL)
533	901211	GRP 1G0371 GRAS AFFIRMATION OF LACTOSE PRODUCT, WHEY PROTEIN ISOLATE AND DAIRY PRODUCT SOLIDS
543	910110	GRP 1G0373 GRAS AFFIRMATION OF CAPRENIN FOR USE AS CONFECTIONERY FAT IN SOFT CANDY AND COATINGS FOR SPECIFIC FOODS
572	910521	GRP 1G0375 GRAS AFFIRMATION PETITION FOR HSH SYRUP
573	910530	GRP 1G0376 GRAS AFFIRMATION PETITION FOR USE OF BCD (BETA CYCLODEXTRIN) IN DRY COCKTAIL MIXES
588	911009	GRP 2G0378 GRAS AFFIRMATION PETITION FOR SUGAR BEET FIBER
589	911009	GRP 2G0379 GRAS AFFIRMATION PETITION FOR OAT FIBERS AND HYDROGEN PEROXIDE
613	911021	GRP 2G0380 GRAS AFFIRMATION PETITION FOR MALTODEXTRIN DERIVED FROM RICE
616	911031	GRP 2G0381 GRAS AFFIRMATION PETITION FOR PHYTASE
627	911212	GRP 2G0386 GRAS AFFIRMATION PETITION FOR 4-HEXYLRESORCINOL FOR PREVENTION OF MELANO-SIS IN SHRIMP
636	920210	GRP 2G0387 GRAS AFFIRMATION PETITION FOR BETA-CYCLODEXTRIN, USE IN REDUCING CHOLESTEROL CONTENT OF LIQUID EGGS

638	920212	GRP 2G0388 GRAS AFFIRMATION PETITION FOR FERMENTATION-DERIVED CELLULOSE
640	920220	GRP 2G0389 GRAS AFFIRMATION PETITION FOR HYDROLYZED RICE FOR USE AS FOOD INGREDIENT
648	920428	GRP 2G0390 GRAS AFFIRMATION PETITION FOR STEVIA LEAVES
651	920519	GRP 2G0391 GRAS AFFIRMATION PETITION FOR LACTITOL FOR USE IN CHEWING GUM, HARD ANDSOFT CANDIES AND FROZEN DAIRY DESSERTS
656	920616	GRP 2G0392 GRAS AFFIRMATION PETITION FOR IMMOBILIZED GLUCOAMYLASE ENZYME PREPARATION
667	920901	GRP 2G0393 GRAS AFFIRMATION PETITION FOR FI-1 SOY FIBER (SOYBEAN HULL FIBER)
685	921208	GRP 3G0396 GRAS AFFIRMATION PETITION OF FERROUS LACTATE FOR USE AS A COLOR FIXATIVE IN BLACK OLIVES
687	921209	GRP 3G0397 GRAS AFFIRMATION PETITION FOR COLLAGEN FIBER
715	930506	GRP 3G0401 SODIUM THIOSULFATE AS A REDUCING AGENT IN BREWED COFFEE AND TEA
737	930826	GRP 3G0403 GRAS AFFIRMATION PETITION FOR TARA GUM (WHEN USED AS GELLING AGENT,THICKENER OR STABILIZER IN FOOD
752	931223	GRP 4G0405 GRAS AFFIRMATION PETITION OF NISIN PREPARATION FOR ADDITION TO 80% CHOLESTEROL REDUCED LIQUID WHOLE EGGS
753	931223	GRP 4G0404 GRAS AFFIRMATION PETITION OF SALATRIM, A REDUCED CALORIE TRIACYLGLYCEROL
755	940105	GRP 4G0406 GRAS AFFIRMATION PETITION OF STEVIA REBAUDIANA BERTONI (STEVIA LEAF) FORUSE IN HERBAL AND FLAVORED TEAS
765	940509	GRP 4G0407 GRAS AFFIRMATION PETITION FOR BOHENIN TO BE USED IN CHOCOLATE AND CHOCO LATE COATINGS
770	940525	GRP 4G0408 NISIN PREPARATION FOR USE AS AN ANTIMICROBIAL AGENT FOR SHELF-LIFE EXTEN SION OF STANDARDIZED AND NON-STANDARDIZED LIQUID EGG, EGG WHITES, EGG YOLKS, AND BLENDS OF THESE EGG PRO
773	940531	GRP 4G0409 CAPRYLIC/CAPRIC TRIGLYCERIDES FOR USE AS A FAT IN FOODS FOR HUMAN CON- SUMPTION

176	940622	GRP 4G0410 GRAS AFFIRMATION PETITION FOR KONJAC FLOUR
177	940627	GRP 4G0411 PECTINS AS STABILIZERS AND THICKENERS IN FOOD

ATTACHMENT 6

GRAS PETITIONS ACTED ON SINCE
OCTOBER 1, 1989

Status Key

F = Filed
C = Complete
W = Withdrawn
* = Completed After Due Date
K = Dropped

** PRIVATE **		MATS PROJECT SUMMARY STATUS REPORT		95-03-03
#	DATE REC	DATEDONE	STATUS	TITLE
39	880509	921221	* C	GRP 8G0342 UREASE ENZYME FROM LACTOBACILLUS PERMENTUM
104	730322	930217	W	GRP 3G0024 CALCIUM HYPOCHLORITE ON FISH FILLETS
105	730503	930419	W	GRP 3G0029 CHLORINE GAS IN AN AQUEOUS SOLUTION AS AN INTERMITTENT SPRAY FOR HOG, BEEF, & LAMB CARCASSES DURING COOLER CHILLING PROC
108	740114	930126	W	GRP 4G0037 SODIUM HYPOCHLORITE FOR PROCESSING OF RED MEATS
113	750314	930212	W	GRP 5G0053 HYPOCHLOROUS ACID SOLUTIONS - ELECTROLYTICALLY PRODUCED FOR APPLICAION TO QUARTERS OR CARCASSES OF BEEF, PORK, & LAMB
116	750908	930518	W	GRP 6G0058 CHLORINE SPRAY AS AN ANTIBACTERIAL AGENT FOR PROCESSING OF BEEF CARCASSES
182	830606	900502	* W	GRP 3G0285 IMMOBILIZED LACTASE ENZYME REACTOR SYSTEM USED TO HYDROLYZE OR DELACTOSE WHEY, WHEY PERMEATE AND MILK PERMEATE
184	850520	941101	W	GRP 5Z0J02 PETITION TO SUSPEND THE GRAS STATUS OF CARRAGEENAN AS AN EMULSIFIER, STABILIZER OR THICKENER IN FOODS

185	770714	940720	C	GRP 7G0088 USE OF BETA-GALACTOSIDASE ENZYME PRODUCED FROM THE YEAST SACCCHAROMYCES LACTIS ENTRAPPED IN A CELLULOSE TRIACETATE FIBER
268	860212	920413	* C	GRP 6G0311 SULFATED BUTYL OLEATE FOR USE IN THE DEHYDRATION OF GRAPES TO RAISINS
269	860725	930503	W	GRP 6G0314 BUKTHORN BERRY PUREE AND JUICE, WITH OR WITHOUT SUGAR ADDED AS A SUPPLEMENTARY VITAMIN (FORMERLY FAP 7A3438)
277	861216	920413	K	GRP 7G0327 HYDROGEN PEROXIDE AS AN ANTIMICROBIAL AGENT IN THE PROCESSING OF GUM ACACIA
281	871011	940119	K	GRP 8G0334 GRAS AFFIRMATION OF HYDROGEN PEROXIDE
420	870127	930201	K	GRP 7G0329 HYDROGEN PEROXIDE AS A PROCESSING AID IN GELATIN
421	870311	910913	W	GRP 7G0331 BONE CHARCOAL, ACETONE, GLUTARALDEHYDE IMMOBILIZED ENZYME PREPARATION SYSTEM WITH SODIUM METABISULFITE AS A PRESERVATIVE
523	870925	900201	K	GRP 7G0333 OZONE AS AN ANTIMICROBIAL AGENT IN FRESH POULTRY CHILLER WATER
531	871207	900323	C	GRP 8G0337 ESCHERICHIA COLI K12 MODIFIED TO PRODUCE PROCHYMOSIN USED IN THE FERMENTATION PRODUCTION OF CHYMOSIN (REF. FAP 8A4048)
534	871201	900130	K	GRP 8G0336 OZONE AS AN ANTIMICROBIAL AGENT FOR USE IN FRESH POULTRY PROCESSING
538	880129	940728	K	GRP 8G0338 HOP EXTRACT, ISOMERIZED LIQUID CO2 AS A FLAVORING AGENT/ADJUVANT IN BEER, ALE AND OTHER MALT BEVERAGES AND OTHER FOODS
351	880920	900223	C	GRP 8G0345 MICROPARTICULATED EGG AND MILK PROTEIN PRODUCT (SIMPLESSE) AS A FAT SUBSTITUTE
363	881222	920226	C	GRP 9G0349 CHYMOSIN (RENNIN) DERIVED FROM A GENETICALLY ENGINEERED STRAIN OF KLUYVEROMYCES MARXIANUS VAR. LACTIS
367	890109	930802	K	GRP 9G0350 STEVIOSIDE NON NUTRITIVE SWEETENER
380	860224	920413	C	GRP 6G0312 ETHYL ESTERS OF FATTY ACIDS FOR USE IN THE DEHYDRATION OF GRAPES TO RAISINS

191	890522	920811	* W	GRP 9G0351 MODIFIED PROTEIN TEXTURIZERS FOR USE IN FROZEN DESSERTS; KRAFT FOODS CO
195	890621	930507	* C	GRP 9G0352 CHYMOSIN ENZYME DERIVED FROM ASPERGILLUS NIGER VAR. AWAMORI FOR USE IN CHEESEMAKING
419	890817	920922	K	GRP 9G0354 TAMARIND SEED POWDER (GUM) FOR USE AS A THICKENER AND STABILIZER IN FOOD
443	891103	921221	C	GRP 0G0358 UREASE ENZYME DERIVED FROM LACTOBACILLUS FERMENTUM FOR USE IN WINE (REF.GRP 8G0342)
445	891127	900810	K	GRP 0G0361 PSYLLIUM SEED HUSK IN READY-TO-EAT HIGH FIBER CEREALS
446	891124	920731	K	GRP 0G0360 ETHYL ALCOHOL (ETHANOL) AS AN ANTIMICROBIAL AGENT IN VARIOUS BAKED GOODS
493	900628	901002	W	GRP 0Z0367 REQUESTS OPINION IF MALTODEXTRINS AND CORN SYRUPS FROM HYDROXYPROPYLSTARCH ARE GRAS
546	900601	900717	K	GRP 0Z0364 ACID CALCIUM PYROPHOSPHATE
600	910918	921008	K	GRP 1G0377 GRAS AFFIRMATION OF ALPHA-ACETOLACTATE DECARBOXYLASE (ALDC) DERIVED BY PURE CULTURE FERMENTATION FROM BACILLUS SUBTILIS
602	910927	930323	W	GRP 1G0372 GRAS AFFIRMATION PETITION FOR AMARANTH GRAIN
610	911016	921001	K	GRP 2G0382 SQUALENE (MARKETED AS A DIETARY FOOD)
618	911122	930204	K	GRP 2G0383 GRAS AFFIRMATION PETITION FOR CITRICIDAL
622	911211	940629	K	GRP 2G0384 GRAS AFFIRMATION PETITION FOR VITAMIN A2
623	911212	920218	K	GRP 2G0385 GRSA AFFIRMATION PETITION FOR FERMENTATION-DERIVED CELLULOSE
624	911212	920109	K	FAP 2G0386 GRAS AFFIRMATION PETITION FOR 4-HEXYLRESORCINOL FOR PREVENTION OF MELANO-SIS IN SHRIMP
672	920924	930621	K	GRP 2G0395 GRAS AFFIRMATION PETITION FOR IMMOBILIZED LACTASE ENZYME PREPARATION DE-RIVED FROM ASPERGILLUS ORYZAE
778	940707	940721	K	GRP 4G0412 GRAS AFFIRMATION PETITION FOR THE USE OF ALPHA AMYLASE DERIVED FROM BACILLUS SUBTILIS CONTAINING GENE FROM BACILLUS STEAROTHERMOPHILUS IN BAKING APPLICATIONS

GRAS AFFIRMATIONS 10/1/89 TO PRESENT

Status Key

F = Filed
 C = Complete
 W = Withdrawn
 * = Completed After Due Date
 K = Dropped

PRIVATE ** DATE REC	MATS PROJECT DATE DONE	SUMMARY STATUS	REPORT TITLE	95-03-03
880509	921221	* C	GRP 8G0342 UREASE ENZYME FROM LACTOBACILLUS FERMENTUM	
770714	940720	C	GRP 7G0088 USE OF BETA-GALACTOSIDASE ENZYME PRODUCED FROM THE YEAST SACCCHAROMYCES LACTIS ENTRAPPED IN A CELLULOSE TRIACETATE FIBER	
860212	920413	* C	GRP 6G0311 SULFATED BUTYL OLEATE FOR USE IN THE DEHYDRATION OF GRAPES TO RAISINS	
871207	900323	C	GRP 8G0337 ESCHERICHIA COLI K12 MODIFIED TO PRODUCE PROCHYMOSIN USED IN THE FERMENTATION PRODUCTION OF CHYMOSIN (REF. PAP 8A4048)	
880920	900223	C	GRP 8G0345 MICROPARTICULATED EGG AND MILK PROTEIN PRODUCT (SIMPLESSE) AS A FAT SUBSTITUTE	
881222	920226	C	GRP 9G0349 CHYMOSIN (RENNIN) DERIVED FROM A GENETICALLY ENGINEERED STRAIN OF KLUYVEROMYCES MARIANUS VAR. LACTIS	
860224	920413	C	GRP 6G0312 ETHYL ESTERS OF FATTY ACIDS FOR USE IN THE DEHYDRATION OF GRAPES TO RAISINS	
890621	930507	* C	GRP 9G0352 CHYMOSIN ENZYME DERIVED FROM ASPERGILLUS NIGER VAR. ANAMORI FOR USE IN CHEESEMAKING	
891103	921221	C	GRP 0G0358 UREASE ENZYME DERIVED FROM LACTOBACILLUS FERMENTUM FOR USE IN WINE (REF. GRP 8G0342)	

FREEZE ON FDA FUNDING

Question. What would be the impact of freezing funding for the FDA at the fiscal year 1995 level in fiscal year 1996?

Answer. FDA's budget request is for \$1,025,310,000 in FY 1996. In FY 1995, our current estimate is \$975,380,000. Freezing our budget at the 1995 level would result in a decrease of just under \$50 million (49,930,000) in 1996, or about 5 percent of our budget request. This means FDA's budget authority would be the same as in FY 1995, but assumes no increases for current user fees or new user fee programs.

Achieving the PDUFA goals set for 1996 and beyond would be jeopardized without the additional funds and FTEs.

FDA would be unable to implement MDUFA user fees, possibly resulting in longer review times and higher backlogs for medical device applications.

FDA would also not fully implement its Import Inspection Enhancement program as proposed in our 1996 budget which is to be used to increase the effectiveness and efficiency of our regulatory compliance program for imported products.

Question. What would be the impact of freezing funding for the FDA at the fiscal year 1995 level for the next five fiscal years?

Answer. Freezing FDA's budget at the 1995 level through 2000 would greatly reduce FDA activities. Budget authority for FDA's Salaries and Expenses (S&E) account in 1995 is \$819,971,000. This excludes user fees, reimbursements, as well as funding for rental payments and buildings & facilities. Using a flat three percent inflation rate to project out-year budgets, this level would rise to \$950,571,000 by 2000.

The proposal would freeze S&E at \$819,971,000 for the entire period. We estimate the cumulative effect would be a reduction of \$130.6 million through the year 2000. While relatively small cuts could probably be absorbed in a given year, continuous reductions of this magnitude would lead to drastic measures which, in turn, would seriously threaten the public health.

Some factors to consider:

- 1) *FDA is a personnel-intensive agency.* Roughly 65 percent of its budget is for pay and benefits costs. The balance of the budget provides operating support for these employees

-- travel, supplies, equipment, telecommunications, etc. -- as they conduct inspections and evaluations of food, drug and device products. And while some savings could undoubtedly come from non-pay areas, by 2000, personnel reductions, as well as possible furloughs would be necessary to remain at the 1995 budget authority level.

2) *FDA is already doing more with less.* FDA is expanding its utilization of user fees to expedite its workload. In October 1992, Congress passed the Prescription Drug User Fee Act (PDUFA) to generate additional revenues to help reduce backlogs of drug applications. Also, FDA has begun implementation of the Mammography Quality Standards Act. These user fee programs have been so successful that the Agency is aggressively seeking legislation to expand into other areas, such as Medical Devices and Imports to further reduce existing backlogs and make FDA more responsive to the needs of the public. As these user fees come into effect, the corresponding workload has increased. Finally, even in non-user-fee areas, FDA's workload, has either increased or remained constant while the number of FTEs has decreased.

3) *Funding level requirements for PDUFA triggers could fall short meaning that FDA could no longer collect fees.* The Prescription Drug User Fee Act (PDUFA) authorizes FDA to charge and collect user fees from industry in order to expedite the drug review process. This legislation has succeeded in helping FDA reduce backlogs of drug applications and get more products to market. Within this legislation are specific funding level requirements that must be met before FDA can collect these fees. FDA's S&E level cannot go below the FY 1992 level, adjusted by the CPI index or by the growth in domestic discretionary funding. For 1995 and 1996, the S&E level would remain above the trigger. However, it appears likely that for 1997, S&E could fall below the trigger thereby prohibiting FDA from collecting fees and retarding the drug review process.

Specifically, the following lists some of the potential results should FDA budget authority remain at the 1995 level through 2000:

- 1) The safety of the nation's blood supply could no longer be guaranteed; blood banks

would be inspected less frequently resulting in increased risks of AIDS, hepatitis, and other serious diseases transmitted through contaminated blood.

2) Drug, biological product, and device review times would increase significantly even with user fees because reviewing physicians have marketable skills and would leave more rapidly than other employees. Access to new life saving therapies would be slowed dramatically.

3) Frequency of plant inspections in most programs would fall resulting in increased hazards in regulated products. The frequency of food inspections would drop significantly. Resources would no longer permit annual inspections of vulnerable products such as infant formula and low acid canned foods. The frequency of import and seafood inspections would also be reduced, increasing the risk of serious foodborne illnesses such as listeria and salmonella, and risks of injury from contaminants such as lead.

4) The perceived lack of FDA's presence and inspectional work in the market place would cause those few firms who may put profit above their social responsibilities to take advantage of FDA's weaknesses and cut corners that may seriously threaten the public health. Alternatively, FDA has helped industry in a number of instances by defusing potential public panics. One example is the near massive recall that ensued when reports of syringes found in sealed Pepsi cans surfaced. FDA moved quickly and decisively to determine that the reports were fraudulent and that no wide-spread tampering had occurred. A second example occurred with regard to use of Alar on apples; public controversy had grown over use of this chemical. FDA worked closely with the other responsible federal agencies to reassure the public that it is indeed safe to eat apples.

QUESTION SUBMITTED BY SENATOR BOND

RECOMBINANT BOVINE SOMATOTROPIN

Question: Attached is material on recombinant bovine somatotropin (rBST) that the Pure Food Campaign has mailed to hundreds of local PTAs in at least seventeen states so far, including PTAs in Missouri. It repeats a number of allegations about the safety of rBST that FDA thoroughly investigated and dismissed before approving rBST and alleges FDA is not doing its job. It may cause thousands of parents active in the PTA to doubt the safety of the milk supply as well as doubt the commitment of FDA to assuring the safety of milk. I understand that the National PTA, at its June meeting in Orlando, is scheduled to vote on a referendum challenging the safety of rBST and urging FDA to reconsider its approval. This is all a far cry from a handful of people dressed in cow costumes emptying milk cartons in from of the local grocery store.

What is FDA doing to counter the misinformation local PTAs are receiving about rBST and the integrity of the FDA? In anticipation of the PTA's board meeting in Washington, D.C., March 8, through March 11, 1995, would FDA kindly respond prior to that date.

Answer: Over the past few years, FDA has published numerous articles and briefing papers which provide information on recombinant bovine somatotropin (rbST). These explain such issues as FDA's review process, what FDA looks for during review of animal drug applications, and the extent to which FDA went to determine whether rbST use would pose any threats to human or animal safety and health.

Since the review of rbST began, the Center for Veterinary Medicine has responded to over 22,000 letters and 2,000 telephone inquiries related to this topic. Examples of the types of information being made available by FDA in response to such queries, include the articles from the "FDA Veterinarian", the "FDA Backgrounder" paper, and the "CVM Update", which follow:

[From FDA Veterinarian, July/August 1993]

Committees Discuss Possible Labeling of BST Products

On May 6 and 7, 1993, FDA's Food and Veterinary Medicine Advisory Committees held a joint meeting to discuss possible labeling of foods derived from cows receiving supplemental bovine somatotropin (BST) if FDA approves the use of supplemental BST for dairy cows. They also explored issues such as what the basis for such labeling would be, what type of labeling might be used, and whether it would be practical to enforce a labeling requirement. At the time of the hearing, four pharmaceutical companies were seeking approval for their recombinantly-produced BST products. These products are intended for use to increase the milk production of dairy cows.

In his charge to the joint Committee, FDA Commissioner David A. Kessler, M.D., said, "It is essential for people to understand exactly how government oversees new technologies, and to have confidence in that process. We will be trying to make sure that happens, by providing the public an opportunity to participate in [this] important policy discussion." Commissioner Kessler asked the joint Committee to consider the following eight questions:

1. Is it important to some or all consumers to know whether milk, dairy products, or meat is derived from BST-supplemented cows?
2. If the answer to the first question is yes, what are the reasons why these consumers believe this information is important?
3. Based on what you have heard at this meeting, and on your own expertise, knowledge, and experience, do you think that there are any consequences that may result from consumption of milk, dairy

products, or meat from BST-supplemented cows?

a. If so, please describe those consequences.

b. If so, please describe the significance of those consequences.

4. Based on what you have heard at this meeting and on your own expertise, knowledge, and experience, does BST supplementation alter milk, dairy products, or meat in any way?

a. If so, how?

b. If so, please describe the significance of the alteration.

5. Would there be any implications for food labeling requirements
(Continued, next page)



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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE

FOOD AND DRUG ADMINISTRATION

CENTER FOR VETERINARY MEDICINE

generally if foods derived from BST-supplemented cows had to be labeled as such?

- a. If so, what might those implications be?
 - b. If not, why not?
6. Are there sound public policy reasons for requiring or encouraging disclosure?
- a. If so, what are they?
 - b. If so, what would be the implications for food labeling generally if those policy reasons were used as a basis for labeling requirements in the case of BST supplementation?
7. Would it make sense to permit foods derived from cows that were not supplemented with BST to be labeled as, say, "Not from cows treated with BST?"
- a. If so, why? If not, why not?
 - b. If so, would such a statement convey any particular meaning to consumers?
 - c. If so, what would that meaning be?
8. Would it be practical for FDA to enforce a requirement that milk, dairy products, or meat derived from BST-supplemented cows be labeled as such?
- a. Would it be practical for FDA to regulate voluntary labeling such as "Not from cows treated with BST?"

The Commissioner and other FDA speakers provided the Committee with information on regulatory policy on food labeling, a legal overview, and an overview of BST. Part of the legal overview included a discussion of misbranding as described in Section 403 of the Federal Food, Drug, and Cosmetic Act (the Act). The Act prohibits misbranding of food. According to the Act, food is misbranded if it does not bear its common or usual name, which must accurately describe the food's basic nature, characterizing properties, or ingredients. Second, a food is misbranded if its labeling is false or misleading in any particular. Labeling may be misleading not only because of what

it says but also because of what it does not say. In other words, labeling is misleading if it does not reveal facts that are material in light of representations made about the product or material with respect to consequences that may result from use of the product.

In the overview of BST, Dr. Gerald Guest, former CVM Director, discussed FDA's role in the review of BST products, the mastitis issue, human food safety, the measurement of BST in body tissues, BST in milk, milk composition, and the current milk, meat, and poultry marketing and monitoring system. In his summary, Dr. Guest noted that BST occurs normally in milk and meat and has no biological effects in humans. The nutritive and processing qualities of milk from BST-treated cows are indistinguishable from milk of non-treated cows. In addition, it has been decided by FDA and confirmed by several external review bodies that food (milk and meat) from BST-treated animals is safe. Current test methods for BST in milk do not distinguish endogenous and recombinant BST. In addition, Dr. Guest maintained that it would be very difficult, and perhaps impossible to develop a practical and accurate method to identify milk or meat from BST-treated cows. He pointed out that the current marketing of milk in the U.S. involves the commingling of milk of many dairy cows from numerous farms. In order to maintain separate supplies of milk from BST-treated and untreated animals, the current marketing practices would have to be significantly changed. The same is true for meat.

Dr. Guest also stated that without an accurate regulatory method to enforce labeling of milk and meat from BST-treated cows, labeling could encourage misbranding and fraud. Although one might conceive of a complicated paper trail certifying that supplemental BST has not been used in certain cows, such a system would be very costly. Finally, Dr. Guest said that approved drugs are used in many food-producing animals in the U.S., including cattle, swine, and poultry. A decision to label milk because it is derived from cows supplemented with BST could appear

to require a decision to label food products derived from every food animal exposed to any animal drug.

Approximately 50 speakers made presentations during the open public comment session of the meeting. Among those who spoke were Congressmen Bernard Sanders (Vermont) and Charles Stenholm (Texas); a representative from Senator Russell Feingold's office (Wisconsin); spokespersons for pharmaceutical companies, consumer groups, trade associations, animal welfare, and producer groups, health and veterinary professionals; and dairy farmers.

On the second day of the meeting, the joint Committee discussed various aspects of BST labeling and expressed their opinions on the eight questions posed by Commissioner Kessler. Dr. Kristen McNutt, President of Consumer Choices, Inc., Ypsilanti, MI, shared with the Committees her review of consumer research which had touched on labeling of BST-treated milk. These included focus group studies, telephone surveys, and a mall intercept study. It appeared that many of the persons studied were unaware, undecided, and uncertain about the use of BST in milk. Some of those surveyed were very much in favor of labeling milk. This seemed more important in families with children. In addition, those consumers who knew about BST often stated that they would consume less milk if it were labeled as being from BST-treated animals.

(Continued, next page)

FDA Veterinarian

David A. Kessler, M.D.
Commissioner of Food and Drugs
Richard H. Teske, D.V.M.
Acting Director
Center for Veterinary Medicine

Linda A. Grasse, Editor

Published bi-monthly
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Comments are invited
Phone: (301) 295-8755
FAX: (301) 295-8831 or write to
FDA Veterinarian (HFD-121)
7500 Standish Place
Rockville, MD 20855



When the joint Committee was asked about their opinions about the eight questions posed by Commissioner Kessler, several stated that they believed that consumers wanted to know whether food is derived from BST-treated cows. Reasons cited for this desire to know included consumer questions about the safety of BST, fear of science and genetically engineered products, fear of the unknown, lack of trust in regulatory agencies, animal welfare concerns, worries about surpluses of milk and subsidies for farmers, the emotional connotations of milk, concern about economic disadvantage for small farmers, "right to know," and concern over hormones in milk.

Other Committee members stated that they believed that while some consumers might like to know if their food came from BST-treated cows, this information was not important since the food is safe. They believed that the reason that some consumers wanted to know this information was due to misinformation they had received about the safety of this product.

Many of the Committee members believed that there were no consequences that might result from consumption of food from BST-supplemented cows.

They did not believe that there were any health consequences from the use of this product. However, a few Committee members said that there were consequences such as increased somatic cells, increased use of antibiotics, increased animal cruelty, and economic and possible health effects due to the decreased consumption of milk.

In answer to the fourth question, several Committee members said that they felt that BST supplementation did not alter milk, dairy products, or meat in any way. A few on the panel disagreed saying that they believed that use of this product might lead to increased somatic cells in milk and antibiotic residues in human foods.

Several Committee members expressed their view that there would be broad implications for food labeling requirements generally if foods derived from BST-supplemented cows were required to be labeled as such. For example, some Committee members thought that this might lead to changes in the labeling requirements for all animal derived products, particularly those produced by biotechnology and those from animals that had received production drugs.

Other panel members disagreed with the notion that labeling of BST-treated

products would necessarily have a strong impact on labeling of other products. Some believed that labeling should be restricted to products containing a large percentage of milk, such as ice cream and yogurt. Other Committee members felt that this was a special case since if it were approved, BST would be the only approved production drug for dairy cows.

A few panel members shared their view that the sixth question about whether or not there were sound public policy reasons for requiring or encouraging disclosure was one of the most difficult for them to answer. After reflection, several of these Committee members decided that they did not believe that there were any such reasons for requiring disclosure. Others believed that disclosure was necessary to ensure FDA's credibility with the public. If the fact that milk or meat from BST-supplemented cows was not revealed, consumers might believe that there was a cover-up. Others asserted that they believed this information should be disclosed, but not necessarily in the form of a label.

Several Committee members stated that they did not believe it would make sense to permit foods derived from cows not supplemented to indicate this on the label because there are no tests to verify the truthfulness of this type of statement. Others disagreed, saying that they believed that this should be allowed.

There did not seem to be consensus on the issue of whether or not it would be practical for FDA to enforce a requirement that products derived from BST-treated cows be labeled as such. A number of Committee members did not believe it would be practical, since there is no test to verify the truthfulness of such labeling. On the other hand, several members believed that while it might be difficult to enforce the requirement, it would be possible. They cited testimony from the day before which provided suggestions for ways to enforce such labeling. This included ideas such as requiring users of BST to register with the government and file with the dairy, etc.

(Continued, next page)

... POSSIBLE LABELING OF BST PRODUCTS (Continued)

At the conclusion of the Committee's discussion, Committee Chair Edward N. Brandt, Jr., M.D., Ph.D., indicated that before labeling of food from BST-supplemented cows could be initiated, many difficult scientific and policy questions would have to be resolved. In addition, Dr. Brandt stated that he hoped the comprehensive discussion of all these issues by the Committee will assist the Agency in its decision making process.

PUBLICATIONS



FDA has announced the availability of a revised Compliance Policy Guide (CPG) entitled "Tracers in Animal Feed." A tracer is a harmless substance such as reduced iron grit coated with an FDA certified color. Under certain conditions, a tracer may be added to a Type A medicated article to help assure the presence and thorough mixing of a drug component. A tracer may be used in this manner only if such use is approved in a new animal drug application or supplement.

Single copies of the revised Compliance Policy Guide (CPG 7126.01) are available free of charge from the *FDA Veterinarian*. Please send two self-addressed adhesive labels to assist the office in processing your request. Additional information on the revised Compliance Policy Guide is available from Edward J. Ballitch, Center for Veterinary Medicine (HFV-230), Food and Drug Administration, 7500 Standish Place, Rockville, MD 20855 (301) 295-8726.

VMAC CONSIDERS BST/MASTITIS ISSUE

On March 31, 1993, FDA's Veterinary Medicine Advisory Committee (VMAC) met to discuss whether the increased incidence of mastitis in dairy cows treated with Monsanto Company's bovine somatotropin product [Sometribove-zinc complex (Sometribove)] as an aid in increasing milk production, and the potential concomitant increase in antibiotic use, represents a risk to human health.

In addition to seven VMAC members, six consultants participated in the meeting which was held in Gaithersburg, Maryland. Committee members at the meeting included the Chair, Steven Sundlof, Dr. Clarence B. Ammerman, Dr. Debra K. Aaron, Dr. William J. Kay, Dr. Howard Rosenfeld, Dr. H. Graham Purchase, and Dr. Kelli A. Caprile. Consultants included Marsha N. Cohen, Professor of Law at the University of California; Dr. Arnold Hentschl, Harbor Beach Veterinary Services, Harbor Beach, Michigan; Dr. Stephen M. Ostroff, Centers for Disease Control; Dr. David Schlaes, Department of Veterans Affairs Medical Center; Dr. Douglas Archer, FDA's

Center for Food Safety and Applied Nutrition; and Dr. C. Richard Dorn, Ohio State University.

During the open public hearing session of the meeting, 26 individuals presented their views on this issue. Among those who spoke were Congressman Bernard Sanders, representatives from the Monsanto company, representatives from consumer groups, private citizens (including dairy producers and practitioners), and representatives of industry and veterinary medical groups.

After hearing all of the presentations and discussing the issue, the committee concluded that the increased risk to human health posed by mastitis and the resulting use of antibiotics is insignificant and manageable. FDA will consider the recommendations of the committee, as well as the data and statements provided by the speakers at the meeting, in deciding the next step in the review of Monsanto's somatotropin. The drug will not be approved until all questions are adequately addressed.

APPROVAL FOR EXPORT REQUESTED

BACITRACIN ZINC (Type A Medicated article). Archer Daniels Midland Company has filed an application requesting approval for export of the drug to 21 countries. The drug is used for

increased rate of weight gain and improved feed efficiency in chicken, turkey, and swine feeds. *Federal Register* 4-6-93.

TECHNICAL AMENDMENT

FDA is amending the animal drug regulations to add PennField Oil Co. to the list of sponsors of Type A medicated articles containing chlortetracycline, oxytetracycline, and oxytetracycline in combination with neomycin base. The Agency inadvertently omitted

PennField Oil Co. from the list of approved sponsors under Title 21, Part 558.15 of the *Code of Federal Regulations*. This action corrects that error. *Federal Register* 4-5-93.

QUESTIONS AND ANSWERS ABOUT BST

FDA approved Monsanto Company's recombinant bovine growth hormone (bovine somatotropin or rbST) product in November 1993 after a comprehensive review of the product's safety and efficacy, including human food safety. The safety of milk from rbST treated cows was clearly demonstrated. Since marketing of Monsanto's product began in February, CVM has received numerous inquiries from consumers concerned about this product. The following are answers to some of the questions we have received on the product which is being marketed under the name of Posilac®.

How does FDA determine the safety and efficacy of new animal drugs such as Posilac®?

In order for a new animal drug to be approved for marketing in the U.S., the sponsor must establish that it is effective and safe. Effectiveness means that the drug does what the company claims (for example, increases milk production). Safety covers three main areas: safety of the food products to humans, safety to the target animal (the cow), and safety to the environment. In addition, companies must prove to FDA that they can consistently manufacture the drug to a specific potency and purity.

Drug sponsors must submit to their New Animal Drug Application (NADA) data to determine the safety and effectiveness of the drug product. In cases where data required by FDA to make decisions are not otherwise available, the drug sponsor is responsible for providing the data. The drug sponsor may conduct the study or may have the research performed by a contract laboratory. FDA has neither the legal authority nor the resources to do the drug testing on its own.

FDA takes a number of steps to monitor the reliability of data submitted to an NADA. Before sponsors conduct their studies, they usually submit study protocols to FDA. In this way, the FDA can comment on the adequacy of the studies and recommend any changes or additions that are necessary. Although the sponsors fund and monitor safety and effectiveness studies, the majority of the trials are conducted by independent scientists at universities, research laboratories, or commercial farms. FDA also has a Bio-research Monitoring Program which allows FDA inspection of safety and effectiveness studies while they are ongoing. Finally, sponsors must submit their raw data to the NADA so that FDA can check the accuracy and completeness of the summary results that

were derived and the statistical methods used.

Is the milk from cows treated with rbST any different from milk from untreated cows?

No, milk from cows treated with Posilac® is not different from milk of non-treated cows. It has the same nutritional benefits as any other milk. It is safe for the consumer.

How do you know that rbST is safe for humans who consume meat and milk from treated cows?

FDA only approved Posilac® after concluding that its use poses no risk to human health. Cows produce bovine somatotropin in their pituitary glands. Thus, we have been naturally exposed to trace levels of bST in beef, milk, and other dairy products. Because it is a protein hormone, bovine somatotropin is broken down during digestion, which renders it biologically inactive and incapable of having an effect in humans. Intact proteins are not absorbed into the body. Even if injected into humans, bST has no effect. In the 1950's, studies were done to look at natural bST as a possible treatment for human dwarfism. The hormone had no effect on those treated. An additional assurance of safety is that heating, such as with cooking and pasteurization, inactivates bST that may be present in milk or meat.

In addition to FDA, a panel of independent medical and veterinary experts at a National Institutes of Health (NIH) Technology Assessment Conference in December 1990, concluded that milk derived from cows treated with rbST is safe for human consumption. Also, the Office of Technology Assessment (OTA) released a report in May 1991 entitled *U.S. Dairy Industry at a Crossroad: Biotechnology and Policy Choices*. The report analyzes technologies, particularly bovine somatotropin, that would likely be

available to the dairy industry in the 1990s. In the report, which was prepared at the request of Congress, OTA agreed with FDA's decision that food from cows treated with bovine somatotropin poses no additional risk to consumers. The World Health Organization (WHO) Joint Expert Committee on Food Additives in 1992 also confirmed FDA's conclusion that the food products from rbST-treated cows are safe for humans, as have the American Medical Association and the drug regulatory bodies of the European Union and other countries including Canada, Mexico, and the U.K.

What about the possibility that insulin-like growth factor I in milk from treated cows will lead to increased rates of breast cancer and other human health problems?

FDA and other scientific and regulatory bodies have thoroughly examined the safety of milk produced by rbST-treated cows and have concluded that it is safe. There is absolutely no possibility that the consumption of milk from rbST-treated cows could increase the risk of breast cancer. Insulin-like growth factor I (IGF-1) is a natural protein which mediates many of somatotropin's actions. It is required for normal growth and possibly health maintenance. IGF-1 is structurally and chemically similar to insulin and is normally present in most body tissues and fluids including human breast milk and saliva.

The consumption of dietary IGF-1 plays no role in either inducing or promoting any human disease, nor does it cause malignant transformations of normal human breast cells. Abnormally low levels of IGF-1 are associated with several disease conditions including dwarfism, malnutrition, osteoporosis and infertility. It has also been suggested that a decline in IGF-1 levels in human tissue causes

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many of the degenerative changes associated with aging.

Levels of IGF-1 in cow's milk and meat are very much lower than the levels found naturally in human blood and other body tissues. The IGF-1 occurs naturally in human breast milk at about the same concentration as that found in cow's milk. FDA has reviewed several comprehensive studies to determine if administering rbST in cows affects the IGF-1 content of their milk. These studies have demonstrated that rbST does not increase the IGF-1 content above levels normally found in milk of non-treated animals.

IGF-1 in milk and meat is not absorbed intact. Dietary IGF-1 in milk and meat is broken down in the gastrointestinal tract by digestion. Undigested IGF-1 is excreted in the feces.

The suggestion that IGF-1 in milk can induce or promote breast cancer in humans or premature growth stimulation in infants is scientifically unfounded. Milk from rbST-treated cows is safe for human consumption.

How can FDA be sure that mastitis caused by using rbST in cows will not lead to increased antibiotic use and antibiotic residues in milk?

Cows treated with Posilac® have a slightly increased risk of mastitis, a common infection of the udder, and antibiotics are often used to treat mastitis. However, FDA has concluded that the increased risk to human health posed by mastitis and the resulting use of antibiotics is insignificant. The effect of Posilac® treatment on the incidence of mastitis is much less than other factors, such as the season, age of the cows, and herd-to-herd variation. For example, the increase in mastitis incidence from winter to summer is at least nine times greater than the increase due to Posilac® treatment.

Another important factor is that therapeutic drugs, such as antibiotics for the treatment of mastitis, are to be used in food-producing animals only under approved conditions and with appropriate milk and meat withdrawal periods (as established by FDA) to ensure that food products are safe for human consumption.

Federal and State programs require milk to be tested for drug residues, and milk found to have unsafe levels of residues must be discarded. Further, producers responsible for violative residues are subject to severe regulatory sanctions.

FDA's Veterinary Medicine Advisory Committee and expert consultants met in an open public hearing in March 1993 to discuss the issue of increased mastitis in Posilac®-treated cows and a potential increase in the risk of antibiotic residues in milk. They concluded that the risk to human health was insignificant. Finally, Monsanto has agreed to an extensive post-approval monitoring program to ensure that the use of Posilac® in cows does not lead to an increase in the incidence of violative antibiotic residues in milk.

Why do you think the product is safe when it causes cow health problems?

FDA would not have approved the drug if there were serious risks to the health of the cows. The labeling for Posilac®, which includes precautions and side effects, provides direction to the farmers who use the drug. Such cautions are included on all drugs, and are based on data from pivotal studies submitted by the drug sponsors. These cautions alert farmers to potential problems that might occur with use of the drug. With this information, farmers can decide whether they will try the drug on their farm. If they decide to use the drug, they may use the labeling information to change their management practices, if possible, to help minimize problems associated with the use of the drug.

Cows using Posilac® may have small decreases in gestation length and birth weight of calves. However, this is not considered to be a serious problem, and actually may help make it easier for the cow to give birth. Health and growth of the calves from Posilac® and control cows was similar. In addition, other cow health problems that might be associated with the use of the drug are not considered by FDA to be serious health problems. Also, these problems did not occur at rates that would prohibit the use of Posilac®.

What about the increased "pus" in the milk from cows treated with rbST?

Some individuals are incorrectly using the word "pus" to refer to somatic cells in milk. FDA concluded that the milk somatic cell count (SCC) may increase in some herds when Posilac® is used. Somatic cells are always present in milk and consist of cells (such as epithelial cells, leukocytes, neutrophils, and macrophages) that are already present in the human body and blood. These cells are necessary to fight infection, and the increase noted in some Posilac®-treated cows likely reflects the slight increase in mastitis incidence and mammary cells which slough off during infection. There are no health consequences associated with the consumption of SCC. Also, somatic cells themselves do not change the appearance of milk. The U.S. government imposes a limit on the maximum level of SCC permitted per dairy farm. However, this is not based on a human safety concern, but rather an economic concern. Increased levels of SCC in milk are associated with reduced cheese yields because enzymes released by somatic cells degrade casein in milk. Some States and dairy processors offer financial bonuses to farmers who produce milk with low SCC. Thus, there are substantial financial incentives for dairy farmers to maintain low SCC levels in their milk.

Why didn't FDA require Monsanto to develop a test to determine whether milk comes from treated cows?

FDA did not require Monsanto to develop such a test because the milk from cows treated with Posilac® has been determined to be safe for human consumption. Since there is no human food safety concern, FDA has no grounds on which to demand such a special identification test. While developing such a test is theoretically possible, it would also be useless for regulatory purposes.

Why aren't you requiring that milk and meat from treated cows be labeled as such?

FDA cannot require special labeling of products from cows treated with
(Continued, next page)

Posilac" because the Agency has concluded that it lacks a basis under the law to require special labeling of such foods. Milk from treated cows is the same as milk of untreated cows. However, voluntary labeling is permitted if it is truthful and not misleading.

In response to requests from several State, industry, and consumer representatives, FDA has published interim guidance on voluntary labeling of products from cows that have not been treated with rbST. This interim guidance was published in the *Federal Register* on February 10, 1994.

Why did FDA approve this drug to increase milk production when we already have too much milk?

By Federal law, social and economic needs for a drug cannot enter into FDA's approval decision. However, in its budget reconciliation bill, Congress included a 90-day moratorium on the sale of rbST following FDA approval. During the 90-day period, the Office of Management and Budget (OMB) con-

ducted a study to address these economic concerns.

In their report, "Use of Bovine Somatotropin (bST) in the United States: Its Potential Effects," OMB stated that income for individual farmers who use bST is likely to increase for both small and large farms. They also believed bST use would increase U.S. milk production by about one percent through Fiscal Year 1999. This would likely lead to slightly lower prices for milk, leading to declines in aggregate dairy farm income by about one percent over the same period. OMB stated that the lower milk prices from bST use are expected to contribute to higher Federal Government dairy price-support costs. Federal dairy price-support program costs are expected to increase by approximately \$150 million in the peak year, Fiscal Year 1996, and decline in later years. However, lower milk prices are expected to decrease costs for nutrition programs like Food Stamps and the Special Supplemental Food Program for Women, Infants, and

Children (WIC). According to OMB, savings in the costs of Federal feeding programs could begin in Fiscal Year 1997, and could completely offset the increased cumulative costs of the Federal dairy price-support program over 10 years. Therefore, approval of animal drugs to improve production helps ensure a bountiful food supply for our children and grandchildren.

Why did FDA approve this drug for use in the U.S. when it is banned in Europe?

The European Community imposed a one-year moratorium on the use of rbST on economic and political grounds. This had nothing to do with rbST safety. In January 1993, the Committee for Veterinary Medicinal Products of the European Union reaffirmed that food products from cows treated with rbST are safe for human consumption, and they recommended the approval of two rbST products based upon their review of all aspects of safety and effectiveness. □

EVALUATION OF MILK RESIDUE SCREENING TESTS

by Joseph A. Settepani, Ph.D.

Beginning in the mid-1980s, reports of several milk surveys were published or released that described finding low levels of animal drug residues in some samples of retail milk. As a result of these findings, organizations representing dairy farmers, milk cooperatives, veterinarians, and State milk officials asked FDA to take the lead in encouraging the development and use of rapid milk residue screening tests. A number of these screening tests for animal drug residues in milk became commercially available about this time, and they were being used by a growing number of responsible milk processors and State milk officials. It was reasoned that these rapid screening tests, which normally take less than 20 minutes to run, could be used on samples taken from the tanker trucks used to collect milk from dairy farms while the trucks were waiting to have their loads pumped into a milk processor's silo. In this way, there would be minimal disruption of the industry, and contami-

nated milk would be effectively prevented from entering the country's food supply.

Responding to these requests, FDA published a Notice in the December 13, 1990 issue of the *Federal Register* (FRI) announcing the Agency's intention to evaluate, on a voluntary basis, commercially available milk residue screening tests. Eleven manufacturers of screening tests (including all of the major manufacturers in this country and several based in Europe) responded to the FR Announcement indicating an interest in having their tests included in the evaluation.

Screening tests for detecting animal drug residues in milk are veterinary devices under the Food, Drug, and Cosmetic Act. As such, there is no pre-clearance requirement for marketing. This means that under the Act these tests can be marketed without FDA evaluating or approving the tests. However, should the Agency determine that a device is misbranded, i.e., the test

does not perform as labeled, it could take action to correct the situation.

Two commercially available rapid screening tests for chloramphenicol in milk were chosen for initial evaluation. Chloramphenicol is an extremely toxic drug for certain sensitive individuals and, despite the fact that its use in food animals was banned by FDA several years ago, there continued to be sporadic reports of its being sold to, and found on, dairy farms.

Protocols for nine experiments designed to evaluate test performance under a variety of field use conditions were developed. The Agency's principal objective in conducting the evaluations was to verify that test performance was accurately described on its label and that directions for use were accurate, complete, and readily understood by test users. As is the case with all analytical method evaluations conducted by FDA, a major consideration was to ensure that each drug claimed

(Continued, next page)

on the label of a test could be reliably detected at or below its established tolerance or safe level in milk. The nine experiments developed at the Center for Veterinary Medicine (CVM) to address these issues were:

- Sensitivity of the test for residues of each drug claimed on its label.
- Selectivity rate, defined as the ability to correctly identify milk containing none of the residues detected by the test.
- The percent of positive responses produced when replicate samples containing various drug concentrations below the test's established sensitivity are assayed (concentration-response data).
- Cross reactivity of the test with other (than the claimed) animal drugs likely to be administered to lactating cattle.
- Test performance in the presence of permitted levels of somatic cells in milk.
- Test performance in the presence of permitted levels of bacteria in milk.
- Identification of critical steps, and the variation permitted in recommended temperatures, volumes, times, etc. in the procedure for conducting the test.
- Comparison of test performance on milk containing incurred residues with analytical results using a chemical-based method of analysis. For chloramphenicol this was a gas chromatographic method. Data from this experiment provides an indication of the existence and detection of metabolites in samples encountered with use of the test on milk from treated cows.
- Test performance on samples of milk that had been preserved for a period of time in a frozen state.
- Data demonstrating the stability and lot-to-lot variation of tests.

The evaluations of chloramphenicol tests were completed in June, 1992, by CVM's Office of Science at Beltsville, Maryland. It was concluded that Charm Sciences' Charm II Chloram-

phenicol Assay and EDI's Inow Editex, Inc.'s EZ-Screen Chloramphenicol Test met the performance standards in the protocol for detection of the drug in milk at a level of 1 ppb. On November 20, 1992, the Milk Safety Branch at FDA's Center for Food Safety and Applied Nutrition (CFSAN) sent a memorandum (M-1-92-111) informing Regional FDA Directors and Milk Specialists—the latter provide oversight to State milk officials—of our acceptance of these two tests for "official" milk monitoring programs.

Beta-lactam (penicillin-type) antibiotics are the most widely used animal drugs in the dairy industry. At their bi-annual meeting in May 1991, the National Conference on Interstate Milk Shipments (NCIMS) passed a resolution requiring the milk industry, beginning on January 1, 1992, to screen each milk tanker truck for beta-lactam residues before its load could be accepted for processing. Beginning July 1, 1992, State milk officials were required to audit the industry monitoring program by conducting their own oversight monitoring. For these reasons, tests to detect beta-lactam drugs in milk were chosen as the second class of tests to be examined under the Agency's screening test evaluation program.

Seven beta-lactam drugs are approved by FDA for use in lactating cattle: ampicillin, amoxicillin, cephalixin, ceftriaxone, cloxacillin, hetacillin, and penicillin. Because hetacillin is rapidly converted to ampicillin in treated animals, it is not considered as a separate drug in residue monitoring programs. Test manufacturers were advised that milk monitoring programs would require monitoring of at least four of the six beta-lactam residues, although we were willing to evaluate tests that only detected as few as a single beta-lactam drug.

Following completion of the work on chloramphenicol tests, the Agency decided to enter into an agreement with AOAC-International for the cooperative evaluation of additional milk residue screening tests. AOAC-International has enjoyed a long history of working with FDA and other Federal

Agencies in evaluating analytical methods. In December 1991, the AOAC International formed a subsidiary, AOAC-Research Institute (AOAC-RI), with a mandate to evaluate screening methods of analysis such as milk residue screening tests. In October 1992, representatives from FDA and AOAC-RI signed a Memorandum of Understanding describing each organization's responsibilities in the cooperative effort. Later, FDA agreed to allow Arthur D. Little, Inc. (ADL) to perform the same functions as AOAC-RI for test manufacturers that preferred to work with that firm. In general, ADL and AOAC-RI took responsibility for administration of the program, provided experts for the concurrent evaluation of data in test manufacturers' applications, and arranged for an independent laboratory to validate some of the data submitted by test manufacturers. Both ADL and AOAC-RI charged test manufacturers a fee for providing these services.

The evaluation protocol for chloramphenicol tests discussed above was modified somewhat for use with beta-lactam tests. Several meetings, held in the Washington, D.C. area, were attended by representatives of ADL, AOAC-RI, NCIMS, milk producers, bovine practitioners, test manufacturers, and representatives of the milk industry to discuss the beta-lactam study protocol while it was in draft form.

Nineteen applications for beta-lactam tests containing data developed according to the modified nine-experiment protocol described above, were received by AOAC-RI and ADL before the established deadline of January 21, 1993. Following evaluation of the submitted data, CVM, together with ADL and AOAC-RI experts, made decisions on which data in the applications needed to be validated by an independent laboratory. After all of the available information on test kit performance had been reviewed, CVM scientists worked with manufacturers to ensure that test labels, including package inserts, directions for use, etc., were accurate and forthright in describing the performance characteristics of their tests.

[From FDA Backgrounder, Nov. 18, 1993]

New Animal Drug For Increasing Milk Production

Milk. It's been a staple for ages among children, adolescents and adults. We're told milk helps build strong teeth and bones and healthy bodies.

To increase milk production in cows, scientists have found a way to produce bovine somatotropin (bST) through recombinant DNA technology (genetic engineering). Recombinant bST is virtually identical to a cow's natural somatotropin, a hormone produced in its pituitary gland that stimulates milk production. Injecting recombinant bST can increase a cow's milk production by 10 to 15 percent.

Monsanto Co., St. Louis, Mo., is the first firm to have its bST product, called somatotrope, approved for marketing by the Food and Drug Administration. Monsanto's bST product, approved Nov. 5, 1993, will be marketed under the trade name Posilac.

"This has been one of the most extensively studied animal drug products to be reviewed by the agency," said FDA Commissioner David A. Kessler, M.D. "We examined more than 120 studies. There were several advisory committees. The public can be confident that milk and meat from bST-treated cows is safe to consume."

FDA is still reviewing bST products from American Cyanamid, Eli Lilly & Company, and Upjohn Company. "Each of the remaining products will be reviewed as stringently as the first," said Suzanne Sechen, Ph.D., an animal scientist in FDA's Center for Veterinary Medicine's division of production drugs.

Recombinant bST is made in much the same way as synthetic human insulin for treating diabetes. The gene for bST is inserted into special bacteria, which then reproduce, replicating the gene. During manufacture, the bST is collected from these bacteria and further processed. The finished, sterile product is then formulated for use in dairy cows.

FDA Review

Recombinant bST first came under FDA review in the early 1980s, when the four companies submitted investigational new animal drug applications. Since that time, the agency has authorized bST testing on more than 20,000 cows in the United States.

During FDA's review of bST, there has been much public debate on safety and economic issues related to the drug.

Some organizations opposed to the use of bST have contended that it causes health problems for cows injected with the drug, for their calves, and for humans who consume milk or meat from these animals.

"We went to unprecedented lengths to allay those fears," said Richard Teske, D.V.M., acting director of FDA's Center

for Veterinary Medicine, "not only through our own rigorous review process, but also by subjecting our findings to peer review through a published journal article and by an outside committee of experts."

The agency's conclusion that recombinant bST poses no risk to human health has been affirmed by scientific reviews in the past several years conducted by the National Institutes of Health; the Congressional Office of Technology Assessment; drug regulatory agencies of Canada, the United Kingdom, and the European Economic Community; and by the Health and Human Services Office of Inspector General.

FDA's Findings

Under the Federal Food, Drug, and Cosmetic Act, FDA is responsible for ensuring the safety to humans of the milk, meat, and other food products from bST-treated cows, as well as the safety and effectiveness of the drug for the animals. It also must ensure that the manufacture and use of the product does not pose environmental hazards.

FDA's Center for Veterinary Medicine determined in the mid-1980s that food products from bST-treated cows are safe for human consumption. In the Aug. 24, 1990, issue of *Science*, FDA scientists summarized more than 120 studies that examined the safety of milk and meat from dairy cows treated with bST. From these studies, FDA concluded that use of bST presents "no increased health risk to consumers."

"We found bST to not represent any human health risks when used in dairy cattle according to the approved labeling," said Teske.

The agency's determination was based on a number of scientific findings. Because it is a protein-based hormone, bST is broken down during digestion, which renders it biologically inactive and incapable of having any effect in humans or animals. Even if injected in humans, bST has no effect, according to studies done in the 1950s, which looked at natural bST as a possible treatment for human dwarfism. (It didn't work.)

In addition, studies show that pasteurization destroys approximately 90 percent of bST, natural or otherwise, that is present in milk.

Also, studies have shown that recombinant bST does not affect the nutritional qualities of milk. Scientists are unable to detect a difference between milk from bST-treated cows and from untreated cows.

Summing up the public health issues surrounding bST, Kessler said, "there is virtually no difference in milk from treated and untreated cows. In fact, it's not possible using current scientific techniques to tell them apart. We have

looked carefully at every single question raised, and we are confident this product is safe for consumers, for cows, and for the environment."

NIH Review

In 1990, a special panel of the National Institutes of Health also looked at recombinant bST. Its members unanimously concluded that bST is effective in increasing milk production and that the composition and nutritional value of the milk from the treated cows are essentially the same as from untreated cows. The panel also found that the meat and milk from the bST-treated herds in the United States were as safe to consumers as those from untreated cows.

In addition, the panel found that well-managed, bST-treated cows experience no greater health problems than untreated cows of equal production and that calves from cows administered bST have normal birth weights, growth, and development.

FDA also reviewed scientific data to see how recombinant bST affects cows. It concluded that bST causes no serious or long-term health effects in treated cows or their offspring.

However, FDA found evidence in the clinical trial data submitted by Monsanto that somatotrope-treated cows have a slightly increased incidence of mastitis, a common infection of a cow's udder. A September 1992 report by the General Accounting Office raised concerns that antibiotic treatment for mastitis could lead to increased antibiotic residues in milk or meat. This could pose a potential health problem—for example, to people who are allergic to the antibiotics.

In March 1993, an FDA advisory committee met to discuss these concerns. The committee concluded that adequate safeguards are in place to prevent unsafe levels of antibiotic residues from entering the milk supply. Food companies, however, may voluntarily label their products, provided the information is truthful and not misleading.

Ensuring Milk Safety

Drugs such as antibiotics are to be used in food-producing animals only under approved conditions and with appropriate withdrawal periods, as established by FDA, to ensure that the food is safe for people to eat.

FDA samples meat and milk to make sure unsafe drug residues are not present. Milk safety also is ensured by the National Conference on Interstate Milk Shipments, an organization of federal health officials, state health and agricultural regulators, and members of the dairy industry. The conference oversees a Voluntary Cooperative State-Public Health Service Program for Certification of Interstate Milk Shippers (IMS) to administer milk safety rules. Responsibilities under this program are divided between state agencies and FDA.

The states are the primary operators of the IMS program, with FDA providing scientific, technical and inspection assistance. All 50 states and the District of Columbia participate in IMS, and nearly 150,000 dairy farms and 800 milk plants, representing almost 90 percent of the total milk production in the United States, are covered.

In addition, the dairy industry currently tests every tanker truck of milk for penicillin-like beta-lactam drugs before processing. Beta-lactams are the most commonly used drugs for treating mastitis.

Milk found to have unsafe residues must be discarded, and producers responsible for unsafe residues are subject to regulatory sanctions.

Because of all these safeguards, FDA was able to conclude that the increased risk to human health posed by mastitis and the resulting use of antibiotics is insignificant and manageable. Said Teske: "As long as the drugs for treating mastitis are administered properly, there shouldn't be any problems with residues in the milk or meat."

Nevertheless, Monsanto has agreed to take additional steps to ensure that bST use does not lead to an increase in antibiotic residue levels.

"In addition to all of the studies, and the current nationwide milk monitoring system, we have put in place an extensive post-approval marketing program that will assure that food products from bST-treated cows meet the high standard of safety required by our statute and demanded by the public," Kessler said.

Monsanto will conduct a post-approval monitoring program that includes the following elements:

- a two-year tracking system of milk production and drug residues in 21 top dairy states that will periodically compare the amount of milk discarded after somatotrope is marketed to the amount discarded prior to approval
- a 12-month comparison of the proportion of milk discarded due to positive drug tests between somatotrope-treated and untreated herds
- a reporting system to monitor all somatotrope use and follow-up on all complaints
- selection of a sample of 24 commercial dairy herds using somatotrope to be specifically monitored for mastitis, animal drug use, and the resulting loss of milk.

Labeling of milk and other foods from bST-treated cows was another issue FDA considered during its review. In May, the agency's food and veterinary medicine advisory committees met for two days to discuss labeling. Based on the committee members' conclusions, and on its own review, FDA concluded that it lacks a basis under the statute to require special labeling of foods from bST-treated cows. Food companies may voluntarily label their products as long as the labeling is truthful and not misleading.

Economic Concerns

During the years recombinant bST has been under review, some organizations also have publicly expressed their concern about potential economic effects of bST on small dairy farmers and the federal dairy price support program.

Those groups have contended that since bST increases milk production there would be more milk on the market. The groups say that more milk would drive small, family dairy farmers out of business because they couldn't compete with big farms when milk prices are lower and would also drive up the cost of the dairy support program.

Economic issues, by law, are not part of FDA's drug approval decision-making process and, therefore, were not considered. However, Congress included a 90-day moratorium on the sale of bST in its budget reconciliation bill, which President Clinton signed on Aug. 10, 1993. During the 90-day period, the Office of Management and Budget will address the economic concerns.

[From CVM Update, Oct. 3, 1994]

BST Update

FDA has been receiving inquiries about the effects of recombinant bovine somatotropin (rbST) on dairy cattle and any associated health impact on consumers. Specifically, the Agency has been asked whether rbST treatment increases the incidence of mastitis, a common infection in a cow's udder, and whether the use of antibiotics to treat mastitis poses any risks to human health. FDA takes the issue of mastitis related to rbST very seriously.

FDA approved Monsanto Company's rbST product (Posilac[®]) to increase milk production in dairy cattle only after Monsanto established that it is effective and safe. Posilac[®] has been marketed since February 1994, and Monsanto, with FDA concurrence, has been conducting an extensive monitoring program designed to ensure that the product continues to be safe and effective and that meat and milk from rbST-treated cows do not contain unsafe levels of antibiotic residues.

More than six million doses of Posilac[®] have been sold for use in at least 560,000 cows on more than 10,000 farms. In the first six months that rbST was marketed, FDA received 96 reports of adverse reactions in cattle. These reports do not raise new concerns about potential health impacts on consumers.

Twenty-four of the reports include mastitis and increased somatic cell counts, twenty-two include swelling of the udder or abnormal milk, and twenty-nine include reproductive disorders. Other reports relate to digestive disorders and foot or leg problems. In some cases a report contains more than one condition.

FDA has determined that the number and severity of the reported conditions are not greater than expected, based on the data from clinical trials of the drug, and as set out in the product's approved labeling. Also, the types of conditions reported are no different from those normally occurring in cattle not treated with rbST.

All rbST-related adverse event reports are required to be submitted to FDA by the drug sponsor, even if the reported conditions are not necessarily related to rbST. In monitoring these reports, FDA typically looks for unusual events not included in labeling as well as trends indicating an increase in the incidence of expected side effects. The Agency also monitors and validates a firm's reporting.

Based on reports submitted to date, FDA does not find any cause for concern. However, the Agency is continuing to monitor herds treated under field conditions and those in a two-year study of dairy farms of various sizes in different regions of the country. FDA also monitors the incidence of mastitis and the amount of milk discarded because of mastitis or use of antibiotic drugs.

It is important for dairy producers to report all adverse reactions associated with the use of rbST. They may report reactions to Monsanto or to FDA through their veterinarian. Veterinarians may report adverse drug reactions to FDA by submitting Form 332a, "Veterinary Adverse Reaction, Lack of Effectiveness or Product Defect Report." Copies of the form are available by calling (301) 594-1755. Adverse reactions may also be reported by telephone to (301) 594-1751 (COLLECT calls accepted weekdays 7:00 a.m. to 4 p.m. Eastern Time). After hours, calls may be made to (301) 594-0797 to leave a recorded message.

QUESTIONS SUBMITTED BY SENATOR McCONNELL

IMPORT INSPECTION FEES

Question. I note that your agency's budget assumes collection of \$15 million in import inspection fees. Please detail with an implementation timetable your plans for authorization, rulemaking, and execution of your import inspection fee proposal so that we might understand how you calculated the assumed level of revenues in your budget. Have you transmitted to Congress proposed legislation to authorize such a fee?

Answer. As part of the Administration's plan, we have included the import inspection user fees as part of our FY 1996 budget request. However, we have not submitted separate legislation. In terms of the \$15 million estimate, let me say that this number is just that -- an estimate. As with PDUFA and MDUFA, we must use a "place holder" if you will, as we develop authorizing language in concert with Congress and industry, using our best guess as to the potential level of user fee activity. Once we have developed the enabling language we will have a better definition of what we need specifically.

DELANEY CLAUSE

Question. I understand that the Delaney Clause has been part of the law since 1958. Both the FDA and EPA have tried to find ways to interpret it as science and technology have outpaced the law. What are some of the practical consequences of a strict interpretation of Delaney, and is it time to update it?

Answer. Congress adopted the Delaney clause based on the philosophy that carcinogens should not be intentionally introduced into food. FDA agreed with this approach in 1958, and still believes in the basic intent--that no person should increase their risk of developing cancer because of the ingestion of any substance that is intentionally added to food.

Delaney applies to food and color additives, which are substances that are added to food to affect the stability, appearance, texture, etc. of the food, and to animal drugs and feed additives that leave residues in food.

Since 1958, the Delaney clause has been invoked only rarely: to remove a handful of color additives; several indirect food additives--packaging materials; one flavoring agent; a veterinary feed additive and a veterinary drug; and saccharin. With the exception of saccharin, substitutes were readily available for these additives, and none of them were of any consequence to

the American food supply. Congress imposed a moratorium on any ban of the sweetener, and it is still in use today.

Scientific issues surrounding the Delaney clause are currently the subject of debate in academia, industry, and elsewhere, including whether it is possible to identify that animal carcinogens are not human carcinogens, and whether it is possible to establish a threshold for the carcinogenic effect. Policy issues include determining whether the risk posed by a potential carcinogen is too trivial to represent a public health risk, and whether it is questionable to tolerate any risk from additives that offer no benefits and for which substitutes are readily available.

The questions surrounding Delaney do not lend themselves to quick or simple answers. FDA will be happy to participate in a discussion of the issues if Congress wishes.

MANAGEMENT

Question. According to the FDA's Quarterly Activities Reports, the number of FTEs at the FDA increased from 7,396 at the end of fiscal year 1989 to 9,311 at the end of fiscal year 1994. Please provide the following information about the Programs and Projects identified in the FDA's 1994 Program and Project Blue Book:

Identify how these additional 1,915 FTEs have been allocated throughout the FDA by showing the yearly net changes in FTE levels by Program, Project, and function from the beginning of fiscal year 1990 to the end of fiscal year 1994. For each Program, Project and function that had a net increase in staffing, describe any improvements that have occurred as a result of that increase.

Answer. FDA received increases in the following areas from FY 1989 thru FY 1994. The increases included resources and FTEs for Generic Drugs, AIDS, Seafood inspections for the Foods program, Prescription Drug User Fees both in FY 1993 and FY 1994, resources and FTEs for Mammography, the Safe Medical Devices Act and resources for Childhood Immunization. Additionally, Congress added money for a Clinical Pharmacology Training Program, and an increase to Orphan Grants. These resources and FTEs were appropriated to assist FDA in carrying out the new laws as mandated by Congress and to help FDA fulfill its mission of protecting the public health as expeditiously and effectively as possible.

FOOD AND DRUG ADMINISTRATION
FULL - TIME EQUIVALENT (FTE) UTILIZATION
FY 1989 THROUGH FY 1994

	1989 FTE	1990 FTE	Change 89 to 90	1991 FTE	Change 90 to 91	1992 FTE	Change 91 to 92	1993 FTE	Change 92 to 93	1994 FTE	Change 93 to 94
FOODS											
Chemical Safety of Foods	900	889	(10)	904	15	956	51	940	(16)	1,010	81
Microbiological Safety of Foods	1,117	1,194	77	1,302	108	1,367	65	1,306	(61)	1,243	(63)
Nutrient Quality and Food Labeling	295	330	35	365	35	380	15	381	1	336	(45)
Cosmetic Safety and Labeling	66	82	(16)	66	4	60	(6)	59	(1)	73	14
FOODS TOTAL	2,377	2,475	98	2,637	162	2,763	126	2,685	(78)	2,662	(23)
HUMAN DRUGS											
New Drug Evaluation/Orphan Drug	877	716	(161)	782	66	807	25	868	61	900	32
Generic Drug Evaluation	252	309	57	368	59	434	66	448	14	430	(18)
OTC Drug Evaluation	58	61	3	69	8	81	12	90	9	99	9
Drug Quality Assurance	644	656	12	737	81	734	(3)	662	(72)	672	(20)
Bio research Monitoring	135	142	7	141	(1)	151	10	170	19	157	(13)
Health Fraud	41	37	(4)	46	9	64	18	61	(3)	52	(9)
Postmarketing Surveillance & Epidemiology	84	81	(3)	82	1	74	(8)	76	2	122	46
Prescription Drug Advertising and Labeling	22	24	2	28	4	45	17	44	(1)	42	(2)
HUMAN DRUGS TOTAL	1,913	2,026	113	2,263	237	2,390	127	2,440	50	2,483	34
BIOLOGICS											
Blood & Blood Products	369	437	68	472	35	490	18	533	43	447	(86)
Therapeutic Products	160	206	46	219	13	256	37	279	23	332	53
Vaccines & Allergenic Products	125	129	4	133	4	152	19	157	5	315	158
BIOLOGICS TOTAL	654	772	118	844	72	898	54	969	71	1,064	175
ANIMALS DRUGS & FEEDS											
Pre-Approval Evaluation	184	166	(18)	207	21	223	16	231	8	225	(6)
Monitoring of Marketed Drugs and Feeds	230	232	2	276	24	283	7	254	(29)	268	14
ADF TOTAL	414	438	24	483	45	506	23	485	(21)	493	8
DEVICES											
Surveillance and Enforcement	611	657	46	732	75	812	80	883	71	920	37
Product Evaluation	352	370	18	415	45	449	34	458	9	548	90
Risk Assessment	137	145	8	157	12	157	0	156	(1)	162	6
Education & Assistance	163	160	(3)	178	18	186	8	185	(1)	96	(89)
DEVICES TOTAL	1,263	1,332	69	1,483	150	1,604	122	1,643	39	1,762	119
NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH											
Integrated Research	135	131	(4)	128	(3)	133	5	141	8	138	(3)
Methods Development	108	104	(4)	102	(2)	108	6	116	8	109	(7)
NCIT	238	235	(3)	230	(7)	239	9	257	18	247	(10)
PROGRAM MANAGEMENT	348	348	0	348	0	362	14	362	0	354	(6)
TOTAL FDA	7,228	7,629	401	8,267	638	8,792	525	8,900	108	8,125	(775)

Question. Provide detailed budgets showing the actual, estimated or projected outlays for each FDA Program and Project for fiscal years 1990 through 1996.

Answer. We will be happy to provide copies of the budget requests from 1990 through 1996. However, the budgets provide obligations by activity rather than outlays.

We will also provide two tables showing the actual, estimated, and projected obligations and outlays by activity for FDA for 1990 through 1996.

[The information follows:]

FOOD AND DRUG ADMINISTRATION
OBLIGATIONS
(Dollars in thousands)

	1990 <u>Actual</u>	1991 <u>Actual</u>	1992 <u>Actual</u>	1993 <u>Actual</u>	1994 <u>Actual</u>	1995 <u>Est.</u>	1996 <u>Est.</u>
Foods	181,082	183,899	206,304	204,690	212,009	213,503	216,856
Drugs	250,430	294,744	328,069	338,996	364,993	366,391	369,639
Devices	89,365	104,778	116,731	128,025	158,818	159,538	161,210
NCTR	27,296	31,407	31,097	32,986	34,834	34,968	35,278
Program management	36,869	39,602	43,696	42,826	42,634	45,571	46,016
GSA Rental payments	25,612	25,612	25,612	26,066	48,565	46,294	46,294
Buildings & Facilities		13,277	10,321	19,664	11,331	33,454	8,350
CRADAs			143	221	197	398	333
Contingency Fund	408		351				
Reimbursements	5,544	10,715	11,845	18,511	51,222	92,102	149,142
Total Obligations	596,606	704,034	774,169	811,985	924,603	992,219	1,033,118

FOOD AND DRUG ADMINISTRATION
OUTLAYS
(Dollars in thousands)

	1990 <u>Actual</u>	1991 <u>Actual</u>	1992 <u>Actual</u>	1993 <u>Actual</u>	1994 <u>Actual</u>	1995 <u>Est.</u>	1996 <u>Est.</u>
Foods	156,157	182,579	203,095	197,993	203,044	214,835	219,454
Drugs	225,013	275,368	329,242	331,006	339,399	353,874	358,263
Devices	83,039	91,584	113,838	121,752	124,818	160,341	156,515
NCTR	25,567	26,790	29,510	31,189	32,005	34,766	34,500
Program management	37,401	40,112	41,114	43,914	45,030	72,131	55,069
GSA rental payments	21,631	26,706	23,748	23,878	48,563	46,294	46,294
Buildings & Facilities	1,938	4,270	11,719	3,902	21,948	19,457	11,777
CRADAs			138	54	294	398	333
Contingency Fund	219		351				
User Fees	---	---	---	(19,583)	(13,779)	19,512	30,144
Total Outlays	550,965	647,409	752,755	734,136	801,322	921,608	912,349

Question. Discuss in detail how the resource allocations indicated in the above responses reflect Agency priorities.

Answer. Our budget reflects our priorities. We must allocate both dollars and people to those areas that FDA is required to regulate by law. We will continue to meet our mandate of protecting the public health.

Over the past few years, a number of laws have passed which have increased our workload. Some examples are the Safe Medical Device Act of 1990, Nutrition Labeling and Education Act, Nutrition Monitoring and Research Act, FDA Revitalization Act, Senior Biomedical Research Service Act, and the Sanitary Transportation of Food Act. FDA has devoted substantial resources to ensure that these laws were effectively implemented.

In response to concerns of the public, industry and Congress, PDUFA was enacted to help us review new drug and biological applications more quickly, while still maintaining our high quality standards. You will see that PDUFA user fees first appear in the 1993 budget and show significant increases in each subsequent year. Similar budgetary growth is planned for MQSA and MDUFA user fees.

Overall, our budget has to reflect our mission of protecting the public health. The public expects the FDA will ensure the safety of the food, drugs, and medical devices. Some recent examples show the importance of FDA's presence to the general public:

- 1) Recently, FDA, in conjunction with other law enforcement agencies, uncovered and dismantled a nation-wide operation that was making counterfeit baby formula (Similac). Acting on adverse event reports, FDA moved quickly and discovered the counterfeit formula and helped bring the operation to a close.

- 2) In 1993, we released a rapid and inexpensive DNA fingerprinting method to screen for the *E. Coli* pathogen. The existence of this pathogen in undercooked hamburgers led to the deaths of four children and to sickness in more than 500 individuals who had eaten at fast-food restaurants in the Pacific Northwest area.

- 3) Also in 1993, we defused a potentially massive product recall by quickly and decisively determining that reports of hypodermic syringes found in sealed cans of Pepsi-Cola were fraudulent and that no wide-scale tampering had occurred.

Question. Describe any improvements that have occurred in these Programs and Projects since the beginning of fiscal year 1991.

Answer. I will be happy to provide this information for the record.

[The information follows:]

FDA IMPROVEMENTS/ACCOMPLISHMENTS SINCE 1991 THAT HAVE ENHANCED THE PUBLIC HEALTH

1) DRUGS AND BIOLOGICS. A number of medically-significant drug and biologic products were approved including: the first implantable contraceptive, Norplant; fludarabine -- a drug for adults with leukemia; two genetically engineered products were approved to help cancer patients -- granulocyte colony-stimulating factor and granulocyte macrophage colony-stimulating factor; the first effective treatment for chronic liver disease resulting from hepatitis C-- recombinant alpha interferon; and a new vaccine for pertussis (whooping cough) that may cause fewer side effects in children.

2) AIDS. A number of advances in the treatment of AIDS were approved. Announced a new policy that allows promising new drugs for treating AIDS and other HIV-related disease to be made more widely available to people unable to take standard therapy and who are not able to participate in controlled studies. The first AIDS drug to be tested under FDA's "parallel track" policy is ddI, an anti-viral drug that acts by inhibiting HIV, the virus that causes AIDS. Licensed a 10-minute diagnostic test kit to be used by health professionals to detect the presence of HIV-1. The kit can be used in health-care settings such as doctors' offices, clinics, emergency rooms, and small hospitals where traditional HIV diagnostic test kits are impractical.

3) FOOD SAFETY AND LABELING. Launched a special inspection of seafood processing plants and other seafood establishments as part of its ongoing efforts to improve seafood safety. Also, extensive changes in food labeling were achieved to implement the 1990 Nutrition Labeling and Education Act.

4) ENFORCEMENT ACTIONS. Recalled and seized products that caused injury and/or death to users. Examples include E-Z-M enema tips, Vitek jaw implants, and injectable collagen products.

5) VETERINARY MEDICINE. Announced a National Drug Residue Milk Monitoring Program to test raw milk for veterinary drug residues. When violative residues are found, the agency will relay the information to

- state milk officials immediately and help states trace the source of the problem.
- 6) Licensed a new vaccine for Japanese encephalitis that is safer and more effective than previously available products.
 - 7) Established a toll-free number to provide information to consumers on breast implants.
 - 8) Approved the first heart-assist device for patients who experience heart failure after surgery.
 - 9) Approved Proscar (finasteride) to treat benign prostatic hyperplasia (BPH), a common problem in older men caused by enlargement of the prostate gland.
 - 10) Approved Depo Provera, an injectable contraceptive, estimated to be 99 percent effective and good for three months.
 - 11) Established a committee of outside experts to deal exclusively with issues involving over-the-counter drugs.
 - 12) Approved Taxol (paclitaxel) to treat ovarian cancer and Imitrex (sumatriptan), an injectable drug that relieves migraine headache pain.
 - 13) After an investigation, U.S. marshals seized 59,600 kilograms of counterfeit bulk drug raw material valued at \$1.5 million.
 - 14) Announced, in conjunction with the Department of Agriculture, a new program to coordinate and expand their efforts to protect consumers from *Salmonella* bacteria in grade A shell eggs.
 - 15) Established a toll-free Seafood Hot Line to answer consumer questions on seafood labeling and buying, handling, and storage.
 - 16) Approved Dornase alpha, commonly called DNase, for the treatment of cystic fibrosis, under accelerated review regulations.
 - 17) Proposed rules that make most banked human tissue -- including bone, ligaments, tendons, fascia (muscle-enclosure tissue), cartilage, corneas, and skin -- subject to some of the same kinds of scrutiny for infectious agents now applied to the nation's blood supply.
 - 18) Warned six major hearing aid manufacturers to stop making misleading claims, and demanded better clinical testing of these devices.

19) Proposed that manufacturers of saline breast implants and testicular implants be required to submit evidence of safety and effectiveness for these products.

20) Published a proposed rule for the safe processing and importing of fish and fishery products. The proposal mandates the use of Hazard Analysis Critical Control Point (HACCP) principles as the most effective and efficient way to ensure that these products are safe. HACCP is an internationally recognized preventive system of hazard controls.

21) Along with EPA and Agriculture, FDA proposed legislation to reform the nations's pesticide laws, particularly as they pertain to food safety.

Question. Provide copies of all supporting materials supplied the Department of Health and Human Services (HHS) or the Office of Management and Budget (OMB) to justify or explain the FDA budget requests for FY 1990 through FY 1996.

Answer. We will be happy to provide copies of the HHS and OMB budgets.

[The information follows:]

[CLERK'S NOTE.--The HHS and OMB budgets were received by the subcommittee, but due to their length they will not appear in the hearing record.]

PUBLIC AFFAIRS

Question. For fiscal year 1994 to present, provide a detailed report on all media and public relations or public affairs-related outlays by the Agency. Identify the nature and amount of each outlay and provide a description of the regulatory purpose for which each outlay was made.

Answer. The primary nature and regulatory purpose of OPA is to explain to Americans actions taken by the agency -- or actions consumers themselves should take -- to protect and promote the public health. This function is by no means carried out exclusively by using the press, TV and radio broadcasts.

For example, during the last fiscal year, OPA engaged in numerous educational activities involving schools, consumer groups, clubs and civic organization to inform the public about the benefits of the new food label. Similar activities were undertaken to explain the principles of the Hazard Analysis Critical Control Points (HACCP), a major initiative to increase the safety of seafood, and FDA's updated Model Food Code for state and

local governments, whose purpose is to prevent foodborne diseases at the retail level. OPA also coordinated with Environmental Protection Service and the U.S. Department of Agriculture on food initiatives connected with pesticide reform and dioxin reassessment, and worked with the Department of Health and Human Services on the creation and announcement of the AIDS Drug Development Task Force.

The majority of OPA's 70.4 FTEs handle tasks aimed at public health education activities and statutory obligations of FDA. In addition to the already described activities, 24 editors, writers and other staffers in the communications section, OPA's most sizable component, write, edit and publish a widely distributed consumer magazine, produce an internal newsletter for FDA employees, and generate visual information for FDA conferences and seminars. Another 22 OPA employees respond annually to more than 50,000 inquiries by industry, the media, and others that are submitted to the agency under the Freedom of Information Act.

The press section has 13 professionals and 7 support personnel whose primary job is to answer thousands of media queries annually received about regulated products, FDA policies and other public health matters within FDA's purview. In addition, the staff writes and disseminates press releases, talk papers and backgrounders on newly approved health care products, tampering and other public health hazards, and important agency initiatives.

There are 3 speech writers on OPA's staff. In addition to writing speeches for all senior managers of FDA, they write and edit reports, testimonies, and scientific articles for the senior managers of the agency.

Question: As of September 17, 1994, the FDA Office of Public Affairs had 73.5 FTEs despite a ceiling for the fiscal year of 70.0 FTEs. Describe in detail the responsibilities of each of these FTEs and the reason for the overrun. What measures are planned to bring the Office within this ceiling?

Answer: Regarding the staffing of the Office of Public Affairs, it is correct that at the end of FY 1994 OPA's employment level was 73.5 full-time equivalents. Since then, however, the OPA staffing has dropped by more than 3 FTEs to the current level of 70.4 FTEs. We are confident that by the end of the current fiscal year, OPA will reach its FY 1995 ceiling of 69 FTEs.

EXPANDING REGULATORY REACH

Question: Please describe and explain any new areas or new types of products in which or over which the FDA has expanded its regulatory reach or has explored such an expansion in the past three years.

Answer. The Federal Food, Drug and Cosmetic Act contains broad definitions of articles subject to its jurisdiction. For example, a drug is defined in part as an article intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease or intended to affect the structure or any function of the human body. A device is similarly defined, except that it must not achieve its primary intended purposes through chemical action within or on the body or be dependent upon being metabolized. FDA continually must respond to new products and evaluate changing marketing circumstances and conditions of use for existing products to determine whether the products meet the statute's definitions and present public health or consumer protection concerns that warrant assertion of FDA jurisdiction. In evaluating the scope of its jurisdiction, the Agency has historically interpreted the statutory definitions broadly and the Supreme Court has upheld that approach. See United States v. An Article of Drug..., Bacto-Unidisk, 394 U.S. 784 (1969).

Representative examples of products over which FDA has asserted or considered asserting jurisdiction include the 1977 assertion of jurisdiction over high-potency A and D vitamins as drugs, the 1983 proposed rule proposing to regulate as drugs vaginal products containing an active ingredient with pharmacologic effect, the 1991 assertion of jurisdiction over saliva and urine collection kits as devices, the 1991 assertion of jurisdiction over human tissue heart valves as devices, and the Agency's assertion of jurisdiction over certain anti-wrinkle products as drugs in 1968 and 1987. FDA has also recently exercised jurisdiction under an infectious disease provision of the Public Health Service Act to require certain testing, donor screening, and recordkeeping for human tissue used in transplantation. Finally, as FDA has previously testified, it has under consideration whether nicotine-containing tobacco products should be regulated under the Federal Food, Drug and Cosmetic Act.

Question: Detail by area or product all outlays made and the number of FTEs utilized as a result of such actual or explored expansions for each fiscal year from 1992 through 1994.

Answer. FDA does not detail by area or product its FTEs. Any staff involved in the examining of actual or explored expansions would have done so along with their other assigned duties.

Question. For fiscal years 1995 and 1996, detail by area or product the estimated number of FTEs that would be involved in such actual or planned expansions and provide a budget for each such area or product detailing estimated or projected outlays.

Answer. Agency staff working on any actual or planned expansions would be doing so in addition to current responsibilities and duties. As a result it is not possible to calculate a specific budget or outlay.

TOBACCO

Question: With respect to tobacco products in particular, please provide: a description of the resources that the FDA would bring to bear in regulating tobacco products should it choose to do so, an estimate of potential annual costs of such regulation, and the statutory and regulatory responsibilities from which such resources would be diverted; and the costs incurred by the FDA to date (in dollars and FTEs) in exploring the regulation of tobacco products, including monies paid to contractors and resources contributed by other federal agencies.

Answer. We are still investigating and evaluating the regulatory options available should the Agency conclude that nicotine-containing tobacco products are drugs subject to the requirements of the Federal Food, Drug, and Cosmetic Act. In order to be in a position to responsibly calculate the cost to the Agency of any specific regulatory approach, we would first need to conclude our investigation, so that we have the proper factual basis on which to base estimates. It is safe to assume, however, that the cost to the government and the nation of implementing any successful tobacco control program would be trivial compared to the enormous cost of the millions of Americans currently addicted to nicotine-containing tobacco products.

EFFICIENCY MEASURES

Question: Please provide the following: any internal memoranda or other reports that analyze ways in which the FDA's operations could be made more efficient. Include any studies on ways to reorganize the FDA, privatize functions of the FDA, or consolidate the Agency's operations; any documents or reports that evaluate or discuss in detail proposals to consolidate all Federal Government food safety operations into a single federal agency.

Answer. I will be happy to provide a copy of a summary of FDA management initiatives compiled in FY 1992.

[The information follows:]

Summary of FDA Management Initiatives Compiled in FY 1992

FOOD AND DRUG ADMINISTRATION

CURRENT FDA MANAGEMENT INITIATIVES

In the FY 94 management plans, the Centers and the field highlighted innovative activities designed to enhance the efficiency and effectiveness of their programs. Beyond these program-specific changes, FDA has embarked upon a number of broad-based initiatives designed to address long-term needs. A number of these activities are described below.

New Drug Review Improvements -- Competitiveness Council Recommendations

The Competitiveness Council made eleven recommendations on the new drug review process in November. In late January, Dr. Kessler sent a status report to the Secretary reiterating his agreement with the principles and policy objectives of the report, and outlining the steps being taken to implement it. Some of these measures (such as contracting for outside reviewers, delegating review of certain INDs to IRBs, international harmonization of review standards and computerization) are mentioned in this plan. In addition, CDER is committed to improving the efficiency of the new drug review process by achieving goals they set at a management retreat last fall. These goals include holding meetings within 45 days after the receipt of an NDA to plan review activity, implementing a consistent filing policy, conducting concurrent primary and secondary reviews, timely labeling decisions, and updated primary review guidelines.

Regulations Initiative

To improve the management and flow of FDA's regulations program the Agency has instituted a regulations initiative designed to (1) focus management attention on the rulemaking process; (2) streamline the process; and (3) develop information systems to manage it better. Already FDA has reviewed the backlog of proposed rules published in the Federal Register on or before December 31, 1985 that were not currently receiving high priority attention within FDA. In December 1991 FDA withdrew 89 proposed rules after determining that final rules would not be issued based upon the original proposals. An FDA Regulations Council was commissioned to focus on FDA-wide regulations management issues. The Council, chaired by the Deputy Commissioner for Policy, is composed of each Center Director or Deputy Director, the Centers'

senior manager responsible for rulemaking activities, the Associate Commissioner for Regulatory Affairs, the Chief Counsel, and the Associate Chief Counsel for Regulations. The first agenda items included: streamlining the regulations process, priority setting procedures, resource allocations, and information systems.

International Harmonization Task Force

As international trade negotiations intensify, FDA's involvement in promoting harmonization of standards, product review criteria, and enforcement procedures has taken on a new and more important status. To enhance FDA's ability to focus such activities in positive directions, Dr. Kessler recently convened a "Task Force on International Harmonization." The Task Force is charged with reviewing FDA's interests and goals in the international arena and making recommendations for the scope and manner of future involvement. The report, due April 1992, will be the basis for integrating international harmonization efforts more fully into FDA's program planning activities and for determining the appropriate level of organizational and resource support.

Foods Management Study

To prepare for future unprecedented challenges in an environment of constrained resources, FDA has initiated a contract management study of the Foods program. This effort, targeted at all organizations supporting the foods mission, will help determine the need for and define management improvements that will enable FDA to perform its food safety responsibilities effectively. FDA personnel are heavily involved with this project. A final report, expected this summer, will include specific recommendations and steps and a timetable for implementation.

Total Quality Management (TQM) in the Office of Management

To promote continued innovation and improvement within FDA's Office of Management (OM), its senior management has been trained in the philosophy of TQM. This method offers a structured approach which is customer oriented. As part of the three to five year implementation process, OM created teams of its customers and employees to review internal process and recommend implementable changes. OM expects this effort to affect all operational aspects of its administrative responsibilities, which include budgeting, personnel, and procurement processes.

Management Information Systems -- Presidential Priority Project

FDA is currently proposing to move ahead with a major management information systems initiative, and to begin preliminary work on the design and development of systems to automate the product approval processes. From FDA's pilot experience with Computer Assisted New Drug Applications (CANDA) in CDER and Computer Assisted Product License Applications (CAPLA) in CBER, there is substantial evidence that automated application submissions can greatly facilitate FDA reviewers' ability to analyze data submissions; can improve communications between sponsors and the Agency; and can reduce review time.

The project envisioned will evaluate the existing processes, identify the data submission requirements, and apply automation support to the transmission media, format and presentation of the data for the reviewer. It will also track the status of applications and will permit post market surveillance of the safety and efficacy of the products. A common systems approach will be used to link together the drugs, biologics, and animal drug review processes and their interface with the field components that are involved in product reviews. FDA is currently contracting for systems expertise to assist in the area of process review. Future efforts will involve standardization, data architecture, and user interface.

Information Management Initiative

In 1992, the FDA will launch a new initiative to define its comprehensive information management needs from an Agency perspective. The primary objective will be to improve access to and utilization of relevant information across all levels of the Agency, thereby facilitating effective planning, program management, and decision making. Building on the current Agency Automated Data Processing/ Telecommunications planning activities, this initiative will focus on information needs which span organizational boundaries. Common information systems requirements and information access needs among the Centers and Offices will be defined. Having developed this inventory, FDA will be better able to prioritize and coordinate new information management projects, thus ensuring integration of the resulting systems. This approach will facilitate information exchange within FDA organizations and will maximize scarce personnel resources by avoiding duplications of effort. FDA is currently contracting for systems expertise to

assist in the characterization of its information management needs.

Integrated Research at National Center for Toxicological Research (NCTR)

In response to the Edwards Committee recommendation that "NCTR's research program must be targeted to the regulatory needs of the Agency," FDA personnel have worked to redesign NCTR's research agenda. Regulatory and laboratory scientists from each Center and the Office of Regulatory Affairs (ORA) met at NCTR with Dr. Blout, Senior Advisor to the Commissioner for Science, to determine where its scientific expertise could best be utilized. This resulted in a reallocation of resources for FY 92 and the development of new long-term goals by NCTR that directly support FDA's regulatory mission.

FDA's Management Control Plan for Implementation of the Federal Managers' Financial Integrity Act (FMFIA)

Since 1990, FDA's efforts to provide reasonable assurance that its resources are protected against waste, fraud, mismanagement, or misappropriation have increased. As required by FMFIA, a five-year plan was designed to evaluate, improve, and report on the Agency's internal control systems. This Management Control Plan takes the Agency through the process of assessing risks and conducting internal control reviews within the organizations responsible for program activities. During FY 92-93, priority programs will focus on the internal control reviews. In addition, further enhancements to assure the integrity of the Generic Drug Program are underway.

FDA Management Committee

Ms. Veverka, Senior Advisor to the Commissioner for Management and Systems, recently convened a management committee including FDA's senior management staff. The committee's purpose is to identify management issues and concerns and propose corrective actions. The committee's areas of responsibility include the use of human resources, information systems, facilities, and other infrastructure elements. The management committee has held a number of agenda-setting meetings, and is beginning to focus on several key topics.

Question: Provide a list of all consultants and detailees currently assigned to the FDA, their Program and Project responsibilities, and the estimated or projected outlays for each such outside consultant or detailee for fiscal years 1995 and 1996.

Answer. We will provide a current list of consultants and detailees by category including their assigned area. Because these consultants, detailees, and advisory committee members may cover more than one category or be on more than one committee the names may be duplicated.

[The information follows:]

LIST OF DETAILEES ASSIGNED TO FDA AS OF 4/95
WITH HOME OFFICE AND DURATION OF DETAIL

Name

Robert Donadio
NIH
2/95-7/95

Judith Wilkenfield
Federal Trade Commission
9/94-5/95

Rosemarie Nemeth-Coslett
NIH/NIDA
9/94-5/95

Audrey Alice Thomas
NIH/NIDA
3/95-5/95

Margaret Flannigan
NIH
6/93-5/95

Gregory Fox
National Naval Medical Center
8/94-8/95

Kathy Mitrangas
Australian Government
2/95-4/95

Frederick Kuchler
USDA
1/95-4/95

LIST OF CURRENT FDA CONSULTANTS BY CENTER AND TITLE
IN FY 95 PP 05 ENDING 950218

CENTER	FULLNAME	PAY PLAN	PAYPLAN PLAN
CBER	BERGFELD, WILMA F	ED	EXPERT (5 USC 3109)
CBER	BERGFELD, WILMA F	ED	EXPERT (5 USC 3109)
CBER	APPELBAUM, FREDERICK R	EF	CONSULTANT (5 USC 3109)
CBER	APPELBAUM, FREDERICK R	EF	CONSULTANT (5 USC 3109)
CBER	ARVIN, ANN M	EF	CONSULTANT (5 USC 3109)
CBER	ARVIN, ANN M	EF	CONSULTANT (5 USC 3109)
CBER	BORDEN, ERNEST C	EF	CONSULTANT (5 USC 3109)
CBER	BORDEN, ERNEST C	EF	CONSULTANT (5 USC 3109)
CBER	CHAGANTI, RAJU S	EF	CONSULTANT (5 USC 3109)
CBER	CHAGANTI, RAJU S	EF	CONSULTANT (5 USC 3109)
CBER	COHEN, ROGER B	EF	CONSULTANT (5 USC 3109)
CBER	COHEN, ROGER B	EF	CONSULTANT (5 USC 3109)
CBER	COUCH, ROBERT B	EF	CONSULTANT (5 USC 3109)
CBER	COUCH, ROBERT B	EF	CONSULTANT (5 USC 3109)
CBER	DAVIS, KATHRYN A	EF	CONSULTANT (5 USC 3109)
CBER	DAVIS, KATHRYN A	EF	CONSULTANT (5 USC 3109)
CBER	DENNY, FLOYD W	EF	CONSULTANT (5 USC 3109)
CBER	DENNY, FLOYD W	EF	CONSULTANT (5 USC 3109)
CBER	DOUGLAS, STEVEN D	EF	CONSULTANT (5 USC 3109)
CBER	DOUGLAS, STEVEN D	EF	CONSULTANT (5 USC 3109)
CBER	DUPONT, HERBERT L	EF	CONSULTANT (5 USC 3109)
CBER	DUPONT, HERBERT L	EF	CONSULTANT (5 USC 3109)
CBER	EHRENFELD, ELVERA	EF	CONSULTANT (5 USC 3109)
CBER	EHRENFELD, ELVERA	EF	CONSULTANT (5 USC 3109)
CBER	EICKHOFF, THEODORE C	EF	CONSULTANT (5 USC 3109)
CBER	EICKHOFF, THEODORE C	EF	CONSULTANT (5 USC 3109)
CBER	FLEMING, THOMAS R	EF	CONSULTANT (5 USC 3109)

CBER	FLEMING, THOMAS R	EF	CONSULTANT (5 USC 3109)
CBER	GABRILOVE, JANICE L	EF	CONSULTANT (5 USC 3109)
CBER	GABRILOVE, JANICE L	EF	CONSULTANT (5 USC 3109)
CBER	GRIFFIN, DIANE E	EF	CONSULTANT (5 USC 3109)
CBER	GRIFFIN, DIANE E	EF	CONSULTANT (5 USC 3109)
CBER	GROOPMAN, JEROME E	EF	CONSULTANT (5 USC 3109)
CBER	GROOPMAN, JEROME E	EF	CONSULTANT (5 USC 3109)
CBER	GROSSMAN, ROBERT I	EF	CONSULTANT (5 USC 3109)
CBER	GROSSMAN, ROBERT I	EF	CONSULTANT (5 USC 3109)
CBER	HALPERN, MICHAEL S	EF	CONSULTANT (5 USC 3109)
CBER	HALPERN, MICHAEL S	EF	CONSULTANT (5 USC 3109)
CBER	HARRISON, CHANTAL R	EF	CONSULTANT (5 USC 3109)
CBER	HARRISON, CHANTAL R	EF	CONSULTANT (5 USC 3109)
CBER	HOFFMAN, DONALD R	EF	CONSULTANT (5 USC 3109)
CBER	HOFFMAN, DONALD R	EF	CONSULTANT (5 USC 3109)
CBER	JOHNSTON, RICHARD B	EF	CONSULTANT (5 USC 3109)
CBER	JOHNSTON, RICHARD B	EF	CONSULTANT (5 USC 3109)
CBER	KANG, BANN C	EF	CONSULTANT (5 USC 3109)
CBER	KANG, BANN C	EF	CONSULTANT (5 USC 3109)
CBER	KARZON, DAVID T	EF	CONSULTANT (5 USC 3109)
CBER	KILLIP, THOMAS	EF	CONSULTANT (5 USC 3109)
CBER	KILLIP, THOMAS	EF	CONSULTANT (5 USC 3109)
CBER	LEMON, STANLEY M	EF	CONSULTANT (5 USC 3109)
CBER	LEMON, STANLEY M	EF	CONSULTANT (5 USC 3109)
CBER	LOPEZ, MANUEL	EF	CONSULTANT (5 USC 3109)
CBER	MARCUS, CAROL S	EF	CONSULTANT (5 USC 3109)
CBER	MARTIN, DANIEL F	EF	CONSULTANT (5 USC 3109)
CBER	MARTIN, DANIEL F	EF	CONSULTANT (5 USC 3109)
CBER	MCINTOSH, KENNETH	EF	CONSULTANT (5 USC 3109)
CBER	MCINTOSH, KENNETH	EF	CONSULTANT (5 USC 3109)
CBER	MELLORS, JOHN W	EF	CONSULTANT (5 USC 3109)

CBER	MELLORS, JOHN W	EF	CONSULTANT (5 USC 3109)
CBER	MITSUYASU, RONALD T	EF	CONSULTANT (5 USC 3109)
CBER	MITSUYASU, RONALD T	EF	CONSULTANT (5 USC 3109)
CBER	MORTIMER, EDWARD A	EF	CONSULTANT (5 USC 3109)
CBER	MORTIMER, EDWARD A	EF	CONSULTANT (5 USC 3109)
CBER	MUNFORD, ROBERT S	EF	CONSULTANT (5 USC 3109)
CBER	MUNFORD, ROBERT S	EF	CONSULTANT (5 USC 3109)
CBER	MUSTOE, THOMAS A	EF	CONSULTANT (5 USC 3109)
CBER	MUSTOE, THOMAS A	EF	CONSULTANT (5 USC 3109)
CBER	OHMAN JR, JOHN L	EF	CONSULTANT (5 USC 3109)
CBER	OHMAN JR, JOHN L	EF	CONSULTANT (5 USC 3109)
CBER	PIERCE, GLENN F	EF	CONSULTANT (5 USC 3109)
CBER	PIERCE, GLENN F	EF	CONSULTANT (5 USC 3109)
CBER	PITHA ROWE, PAULA M	EF	CONSULTANT (5 USC 3109)
CBER	PITHA ROWE, PAULA M	EF	CONSULTANT (5 USC 3109)
CBER	PLOPPER, CHARLES G	EF	CONSULTANT (5 USC 3109)
CBER	PLOPPER, CHARLES G	EF	CONSULTANT (5 USC 3109)
CBER	REISHAN, ROBERT E	EF	CONSULTANT (5 USC 3109)
CBER	REISHAN, ROBERT E	EF	CONSULTANT (5 USC 3109)
CBER	ROBBINS, FREDERICK C	EF	CONSULTANT (5 USC 3109)
CBER	ROBBINS, FREDERICK C	EF	CONSULTANT (5 USC 3109)
CBER	RODRIGUEZ, GILBERTO E	EF	CONSULTANT (5 USC 3109)
CBER	RODRIGUEZ, GILBERTO E	EF	CONSULTANT (5 USC 3109)
CBER	SAYERS, MERLIN H	EF	CONSULTANT (5 USC 3109)
CBER	SAYERS, MERLIN H	EF	CONSULTANT (5 USC 3109)
CBER	SCHULLER, DIANE E	EF	CONSULTANT (5 USC 3109)
CBER	SCHULLER, DIANE E	EF	CONSULTANT (5 USC 3109)
CBER	WEINER, DAVID B	EF	CONSULTANT (5 USC 3109)
CBER	WEINER, DAVID B	EF	CONSULTANT (5 USC 3109)
CBER	WHITE II, GILBERT C	EF	CONSULTANT (5 USC 3109)
CBER	WHITE II, GILBERT C	EF	CONSULTANT (5 USC 3109)

CBER	WILFERT, CATHERINE M	EF	CONSULTANT (S USC 3109)
CBER	WILFERT, CATHERINE M	EF	CONSULTANT (S USC 3109)
CBER	ZAPISEK, WILLIAM F	EF	CONSULTANT (S USC 3109)
CBER	ZAPISEK, WILLIAM F	EF	CONSULTANT (S USC 3109)
CBER	ALBERT, NOEL S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	ANDERSON, KENNETH C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	ANDERSON, W FRENCH	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	APICELLA, MICHAEL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	AUGUST, CHARLES S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	BELSHE, ROBERT B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	BERMAN, ELLIN	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	BLUMENTHAL, MALCOLM N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	BOWMAN, JAMES E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	BRENNER, MALCOLM K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	BROUDY, VIRGINIA C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	BUSCH, MICHAEL P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	CORMAN LUBAN, NAOMI L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	DESHAZO, RICHARD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	EASTLUND, D TED	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	FERRIERI, PATRICIA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	GLODE, MARY P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	HARPOOL, DENNIS R	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CBER	HECK, ELLEN L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	HONG, RICHARD	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	KAGEY SOBOTKA, ANNE	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	KANG, BANN C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	KATZ, LOUIS M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	KLEINERMAN, EUGENIE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	NORMAN, DOUGLAS J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	OGRA, PEARAY L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	PILIAVIN, JANE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	REECE, ELENA R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	ROOS, RAYMOND P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	SCHOEN, MALCOLM S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	SHAPIRO, ARELL S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	SNYDER, EDWARD L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	TERR, ABBA I	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	VILLALTA, FERNANDO V	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	VOSE, JULIE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	WHITSETT, CAROLYN F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	WOODLAND, ROBERT T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CBER	WOODLE, ERVIN S	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CBER	YUNGINGER, JOHN W	EI	ADVISORY COMMITTEE
			MEMBER (OTHER)
CDRH	ABBEY, JUNE C	EF	CONSULTANT (5 USC 3109)
CDRH	ABBEY, JUNE C	EF	CONSULTANT (5 USC 3109)
CDRH	ABBOTT, RICHARD L	EF	CONSULTANT (5 USC 3109)
CDRH	ABBOTT, RICHARD L	EF	CONSULTANT (5 USC 3109)
CDRH	AGARWAL, GYAN C	EF	CONSULTANT (5 USC 3109)
CDRH	AGARWAL, GYAN C	EF	CONSULTANT (5 USC 3109)
CDRH	ALLEN, GEORGE W	EF	CONSULTANT (5 USC 3109)
CDRH	ALLEN, GEORGE W	EF	CONSULTANT (5 USC 3109)
CDRH	ALLEN, MACHELLE H	EF	CONSULTANT (5 USC 3109)
CDRH	ALLEN, MACHELLE H	EF	CONSULTANT (5 USC 3109)
CDRH	ALLMAN, ROBERT M	EF	CONSULTANT (5 USC 3109)
CDRH	ALLMAN, ROBERT M	EF	CONSULTANT (5 USC 3109)
CDRH	AMADOR, ELIAS	EF	CONSULTANT (5 USC 3109)
CDRH	AMADOR, ELIAS	EF	CONSULTANT (5 USC 3109)
CDRH	ARONOFF, BILLIE L	EF	CONSULTANT (5 USC 3109)
CDRH	ARONOFF, BILLIE L	EF	CONSULTANT (5 USC 3109)
CDRH	AUCHINCLOSS JR, HUGH	EF	CONSULTANT (5 USC 3109)
CDRH	AUCHINCLOSS JR, HUGH	EF	CONSULTANT (5 USC 3109)
CDRH	AZIZ, SALIM	EF	CONSULTANT (5 USC 3109)
CDRH	AZIZ, SALIM	EF	CONSULTANT (5 USC 3109)
CDRH	BALKANY, THOMAS J	EF	CONSULTANT (5 USC 3109)
CDRH	BALKANY, THOMAS J	EF	CONSULTANT (5 USC 3109)
CDRH	BARON, WILLIAM S	EF	CONSULTANT (5 USC 3109)
CDRH	BARON, WILLIAM S	EF	CONSULTANT (5 USC 3109)
CDRH	BAUMGARTEN, ALEXANDER	EF	CONSULTANT (5 USC 3109)
CDRH	BAUMGARTEN, ALEXANDER	EF	CONSULTANT (5 USC 3109)
CDRH	BELIN, MICHAEL W	EF	CONSULTANT (5 USC 3109)
CDRH	BELIN, MICHAEL W	EF	CONSULTANT (5 USC 3109)
CDRH	BENSON, DANIEL R	EF	CONSULTANT (5 USC 3109)

CDRH	BENSON, DANIEL R	EF	CONSULTANT (5 USC 3109)
CDRH	BENTLEY, STUART A	EF	CONSULTANT (5 USC 3109)
CDRH	BENTLEY, STUART A	EF	CONSULTANT (5 USC 3109)
CDRH	BERTOLAMI, CHARLES N	EF	CONSULTANT (5 USC 3109)
CDRH	BERTOLAMI, CHARLES N	EF	CONSULTANT (5 USC 3109)
CDRH	BLACK, FRANKLIN O	EF	CONSULTANT (5 USC 3109)
CDRH	BLACK, FRANKLIN O	EF	CONSULTANT (5 USC 3109)
CDRH	BOSWICK JR, JOHN A	EF	CONSULTANT (5 USC 3109)
CDRH	BOSWICK JR, JOHN A	EF	CONSULTANT (5 USC 3109)
CDRH	BOUCHER, JAMES A	EF	CONSULTANT (5 USC 3109)
CDRH	BOUCHER, JAMES A	EF	CONSULTANT (5 USC 3109)
CDRH	BOULWARE, DENNIS W	EF	CONSULTANT (5 USC 3109)
CDRH	BOULWARE, DENNIS W	EF	CONSULTANT (5 USC 3109)
CDRH	BOYARSKY, SAUL	EF	CONSULTANT (5 USC 3109)
CDRH	BOYARSKY, SAUL	EF	CONSULTANT (5 USC 3109)
CDRH	BRADLEY, ARTHUR	EF	CONSULTANT (5 USC 3109)
CDRH	BRADLEY, ARTHUR	EF	CONSULTANT (5 USC 3109)
CDRH	BRENNER, DEAN E	EF	CONSULTANT (5 USC 3109)
CDRH	BRENNER, DEAN E	EF	CONSULTANT (5 USC 3109)
CDRH	BROWN, MORTON B	EF	CONSULTANT (5 USC 3109)
CDRH	BROWN, MORTON B	EF	CONSULTANT (5 USC 3109)
CDRH	BRUNSKI, JOHN B	EF	CONSULTANT (5 USC 3109)
CDRH	BRUNSKI, JOHN B	EF	CONSULTANT (5 USC 3109)
CDRH	BRUSKEWITZ, REGINALD C	EF	CONSULTANT (5 USC 3109)
CDRH	BRUSKEWITZ, REGINALD C	EF	CONSULTANT (5 USC 3109)
CDRH	BULL, BRIAN S	EF	CONSULTANT (5 USC 3109)
CDRH	BULL, BRIAN S	EF	CONSULTANT (5 USC 3109)
CDRH	CANADY, ALEXA I	EF	CONSULTANT (5 USC 3109)
CDRH	CARSON, PAUL L	EF	CONSULTANT (5 USC 3109)
CDRH	CARSON, PAUL L	EF	CONSULTANT (5 USC 3109)
CDRH	CARSON, SANDRA A	EF	CONSULTANT (5 USC 3109)

CDRH	CARSON, SANDRA A	EF	CONSULTANT (5 USC 3109)
CDRH	CHARACHE, PATRICIA	EF	CONSULTANT (5 USC 3109)
CDRH	CLAUW, DANIEL J	EF	CONSULTANT (5 USC 3109)
CDRH	CLAUW, DANIEL J	EF	CONSULTANT (5 USC 3109)
CDRH	CONNELL, ELIZABETH B	EF	CONSULTANT (5 USC 3109)
CDRH	CONNELL, ELIZABETH B	EF	CONSULTANT (5 USC 3109)
CDRH	COOPER, SHELDON M	EF	CONSULTANT (5 USC 3109)
CDRH	COOPER, SHELDON M	EF	CONSULTANT (5 USC 3109)
CDRH	CORASH, LAURENCE M	EF	CONSULTANT (5 USC 3109)
CDRH	CORASH, LAURENCE M	EF	CONSULTANT (5 USC 3109)
CDRH	CRAWFORD, ALVIN H	EF	CONSULTANT (5 USC 3109)
CDRH	CUTLER, JAMES A	EF	CONSULTANT (5 USC 3109)
CDRH	CUTLER, JAMES A	EF	CONSULTANT (5 USC 3109)
CDRH	D ORSI, CARL J	EF	CONSULTANT (5 USC 3109)
CDRH	D ORSI, CARL J	EF	CONSULTANT (5 USC 3109)
CDRH	DAVID, YADIN	EF	CONSULTANT (5 USC 3109)
CDRH	DAVID, YADIN	EF	CONSULTANT (5 USC 3109)
CDRH	DAVIS, MARY E	EF	CONSULTANT (5 USC 3109)
CDRH	DAVIS, MARY E	EF	CONSULTANT (5 USC 3109)
CDRH	DAY, HARVEY J	EF	CONSULTANT (5 USC 3109)
CDRH	DAY, HARVEY J	EF	CONSULTANT (5 USC 3109)
CDRH	DEHAVEN, KENNETH E	EF	CONSULTANT (5 USC 3109)
CDRH	DEHAVEN, KENNETH E	EF	CONSULTANT (5 USC 3109)
CDRH	DEJOSEPH, JEANNE F	EF	CONSULTANT (5 USC 3109)
CDRH	DESTOQUET, JUDY M	EF	CONSULTANT (5 USC 3109)
CDRH	DESTOQUET, JUDY M	EF	CONSULTANT (5 USC 3109)
CDRH	DEYE, JAMES	EF	CONSULTANT (5 USC 3109)
CDRH	DI LORETO, ROBERT R	EF	CONSULTANT (5 USC 3109)
CDRH	DI LORETO, ROBERT R	EF	CONSULTANT (5 USC 3109)
CDRH	DIEGELMANN, ROBERT F	EF	CONSULTANT (5 USC 3109)

CDRH	DIEGELMANN, ROBERT F	EF	CONSULTANT (5 USC 3109)
CDRH	DONATUCCI, CRAIG F	EF	CONSULTANT (5 USC 3109)
CDRH	DONATUCCI, CRAIG F	EF	CONSULTANT (5 USC 3109)
CDRH	DORFMAN, SALLY F	EF	CONSULTANT (5 USC 3109)
CDRH	DORFMAN, SALLY F	EF	CONSULTANT (5 USC 3109)
CDRH	DOUMAS, BASIL T	EF	CONSULTANT (5 USC 3109)
CDRH	DOUMAS, BASIL T	EF	CONSULTANT (5 USC 3109)
CDRH	DOWNES, THOMAS D	EF	CONSULTANT (5 USC 3109)
CDRH	DOWNES, THOMAS D	EF	CONSULTANT (5 USC 3109)
CDRH	DRASNER, KENNETH	EF	CONSULTANT (5 USC 3109)
CDRH	DRUMMOND, JAMES L	EF	CONSULTANT (5 USC 3109)
CDRH	DRUMMOND, JAMES L	EF	CONSULTANT (5 USC 3109)
CDRH	DUBLER, NANCY A	EF	CONSULTANT (5 USC 3109)
CDRH	DUBLER, NANCY A	EF	CONSULTANT (5 USC 3109)
CDRH	DUNCANSON JR, MANVILLE G	EF	CONSULTANT (5 USC 3109)
CDRH	DUNCANSON JR, MANVILLE G	EF	CONSULTANT (5 USC 3109)
CDRH	EAST, THOMAS D	EF	CONSULTANT (5 USC 3109)
CDRH	EDELSTEIN, PAUL H	EF	CONSULTANT (5 USC 3109)
CDRH	EDWARDS, LEILA	EF	CONSULTANT (5 USC 3109)
CDRH	EDWARDS, LEILA	EF	CONSULTANT (5 USC 3109)
CDRH	ENGLER, PETER E	EF	CONSULTANT (5 USC 3109)
CDRH	ENGLER, PETER E	EF	CONSULTANT (5 USC 3109)
CDRH	FAJARDO, LAURIE L	EF	CONSULTANT (5 USC 3109)
CDRH	FAJARDO, LAURIE L	EF	CONSULTANT (5 USC 3109)
CDRH	FEIG, STEPHEN A	EF	CONSULTANT (5 USC 3109)
CDRH	FEIG, STEPHEN A	EF	CONSULTANT (5 USC 3109)
CDRH	FERGUSON PELL, MARTIN W	EF	CONSULTANT (5 USC 3109)
CDRH	FEWKES, JESSICA L	EF	CONSULTANT (5 USC 3109)
CDRH	FEWKES, JESSICA L	EF	CONSULTANT (5 USC 3109)
CDRH	FOSTER, HENRY W	EF	CONSULTANT (5 USC 3109)
CDRH	FOSTER, HENRY W	EF	CONSULTANT (5 USC 3109)

CDRH	FRANCIS, LESLIE P	EF	CONSULTANT (5 USC 3109)
CDRH	FRANCIS, LESLIE P	EF	CONSULTANT (5 USC 3109)
CDRH	FRANCISCO, ALICE M	EF	CONSULTANT (5 USC 3109)
CDRH	FRANCISCO, ALICE M	EF	CONSULTANT (5 USC 3109)
CDRH	FRIZZELL, LEON A	EF	CONSULTANT (5 USC 3109)
CDRH	FRIZZELL, LEON A	EF	CONSULTANT (5 USC 3109)
CDRH	GARRA, BRIAN S	EF	CONSULTANT (5 USC 3109)
CDRH	GARRA, BRIAN S	EF	CONSULTANT (5 USC 3109)
CDRH	GENCO, ROBERT J	EF	CONSULTANT (5 USC 3109)
CDRH	GENCO, ROBERT J	EF	CONSULTANT (5 USC 3109)
CDRH	GERSON, BENJAMIN	EF	CONSULTANT (5 USC 3109)
CDRH	GERSON, BENJAMIN	EF	CONSULTANT (5 USC 3109)
CDRH	GILBERT, HARRIET S	EF	CONSULTANT (5 USC 3109)
CDRH	GILBERT, HARRIET S	EF	CONSULTANT (5 USC 3109)
CDRH	GLOWACKI, JULIANNE	EF	CONSULTANT (5 USC 3109)
CDRH	GLOWACKI, JULIANNE	EF	CONSULTANT (5 USC 3109)
CDRH	GODWIN, JOHN E	EF	CONSULTANT (5 USC 3109)
CDRH	GODWIN, JOHN E	EF	CONSULTANT (5 USC 3109)
CDRH	GOLDSTEIN, JEROME C	EF	CONSULTANT (5 USC 3109)
CDRH	GOLDSTEIN, JEROME C	EF	CONSULTANT (5 USC 3109)
CDRH	GOLDSTEIN, MOISE	EF	CONSULTANT (5 USC 3109)
CDRH	GOLDSTEIN, MOISE	EF	CONSULTANT (5 USC 3109)
CDRH	GOLDSTICK, THOMAS K	EF	CONSULTANT (5 USC 3109)
CDRH	GOODE, RICHARD L	EF	CONSULTANT (5 USC 3109)
CDRH	GOODE, RICHARD L	EF	CONSULTANT (5 USC 3109)
CDRH	GOODIS, HAROLD E	EF	CONSULTANT (5 USC 3109)
CDRH	GOODIS, HAROLD E	EF	CONSULTANT (5 USC 3109)
CDRH	GRAY, JOEL E	EF	CONSULTANT (5 USC 3109)
CDRH	GRAY, JOEL E	EF	CONSULTANT (5 USC 3109)
CDRH	GREENSPAN, DEBORAH S	EF	CONSULTANT (5 USC 3109)
CDRH	GREGORATOS, GABRIEL	EF	CONSULTANT (5 USC 3109)

CDRH	GREGORATOS, GABRIEL	EF	CONSULTANT (5 USC 3109)
CDRH	GRODY, WAYNE W	EF	CONSULTANT (5 USC 3109)
CDRH	GUPTA, SUDHIR	EF	CONSULTANT (5 USC 3109)
CDRH	GUPTA, SUDHIR	EF	CONSULTANT (5 USC 3109)
CDRH	HANSBROUGH, JOHN F	EF	CONSULTANT (5 USC 3109)
CDRH	HANSBROUGH, JOHN F	EF	CONSULTANT (5 USC 3109)
CDRH	HARMS, STEVEN E	EF	CONSULTANT (5 USC 3109)
CDRH	HARMS, STEVEN E	EF	CONSULTANT (5 USC 3109)
CDRH	HARRIS, MICHAEL G	EF	CONSULTANT (5 USC 3109)
CDRH	HARRIS, MICHAEL G	EF	CONSULT/VT (5 USC 3109)
CDRH	HATTIS, DALE B	EF	CONSULTANT (5 USC 3109)
CDRH	HATTIS, DALE B	EF	CONSULTANT (5 USC 3109)
CDRH	HILBORNE, LEE H	EF	CONSULTANT (5 USC 3109)
CDRH	HILBORNE, LEE H	EF	CONSULTANT (5 USC 3109)
CDRH	HILL, WASHINGTON C	EF	CONSULTANT (5 USC 3109)
CDRH	HILL, WASHINGTON C	EF	CONSULTANT (5 USC 3109)
CDRH	HOLTZMAN, NEIL A	EF	CONSULTANT (5 USC 3109)
CDRH	HOLTZMAN, NEIL A	EF	CONSULTANT (5 USC 3109)
CDRH	HOMMES, FREDERICKU A	EF	CONSULTANT (5 USC 3109)
CDRH	HOMMES, FREDERICKU A	EF	CONSULTANT (5 USC 3109)
CDRH	HOOVER, EDDIE L	EF	CONSULTANT (5 USC 3109)
CDRH	HOOVER, EDDIE L	EF	CONSULTANT (5 USC 3109)
CDRH	HURST, ROBERT W	EF	CONSULTANT (5 USC 3109)
CDRH	HURTUBISE, PAUL E	EF	CONSULTANT (5 USC 3109)
CDRH	HURTUBISE, PAUL E	EF	CONSULTANT (5 USC 3109)
CDRH	INGLE, JAMES N	EF	CONSULTANT (5 USC 3109)
CDRH	ITANO, MASASHI	EF	CONSULTANT (5 USC 3109)
CDRH	ITANO, MASASHI	EF	CONSULTANT (5 USC 3109)
CDRH	JACKSON, CAROL A	EF	CONSULTANT (5 USC 3109)
CDRH	JACKSON, CAROL A	EF	CONSULTANT (5 USC 3109)
CDRH	JENKINS, HERMAN A	EF	CONSULTANT (5 USC 3109)

CDRH	JENKINS, HERMAN A	EF	CONSULTANT (5 USC 3109)
CDRH	JOHNS, MICHAEL M	EF	CONSULTANT (5 USC 3109)
CDRH	JOHNS, MICHAEL M	EF	CONSULTANT (5 USC 3109)
CDRH	JONES, ALAN R	EF	CONSULTANT (5 USC 3109)
CDRH	JONES, ALAN R	EF	CONSULTANT (5 USC 3109)
CDRH	KANE, WILLIAM J	EF	CONSULTANT (5 USC 3109)
CDRH	KANE, WILLIAM J	EF	CONSULTANT (5 USC 3109)
CDRH	KASS, EVAN J	EF	CONSULTANT (5 USC 3109)
CDRH	KASS, EVAN J	EF	CONSULTANT (5 USC 3109)
CDRH	KELLOGG, JAMES A	EF	CONSULTANT (5 USC 3109)
CDRH	KELLOGG, JAMES A	EF	CONSULTANT (5 USC 3109)
CDRH	KELLY, DOROTHY H	EF	CONSULTANT (5 USC 3109)
CDRH	KELLY, DOROTHY H	EF	CONSULTANT (5 USC 3109)
CDRH	KESZLER, MARTIN	EF	CONSULTANT (5 USC 3109)
CDRH	KILENY, PAUL R	EF	CONSULTANT (5 USC 3109)
CDRH	KILENY, PAUL R	EF	CONSULTANT (5 USC 3109)
CDRH	KINZE, JEANNIE J	EF	CONSULTANT (5 USC 3109)
CDRH	KINZE, JEANNIE J	EF	CONSULTANT (5 USC 3109)
CDRH	KOEPKE, JOHN A	EF	CONSULTANT (5 USC 3109)
CDRH	KOEPKE, JOHN A	EF	CONSULTANT (5 USC 3109)
CDRH	KOONTZ, FRANK P	EF	CONSULTANT (5 USC 3109)
CDRH	KOONTZ, FRANK P	EF	CONSULTANT (5 USC 3109)
CDRH	KU, ANDREW	EF	CONSULTANT (5 USC 3109)
CDRH	LADOULIS, CHARLES T	EF	CONSULTANT (5 USC 3109)
CDRH	LADOULIS, CHARLES T	EF	CONSULTANT (5 USC 3109)
CDRH	LAPPE, MARC A	EF	CONSULTANT (5 USC 3109)
CDRH	LAPPE, MARC A	EF	CONSULTANT (5 USC 3109)
CDRH	LAVINE, LEROY S	EF	CONSULTANT (5 USC 3109)
CDRH	LAVINE, LEROY S	EF	CONSULTANT (5 USC 3109)
CDRH	LERNER, ROBERT M	EF	CONSULTANT (5 USC 3109)

CDRH	LERNER, ROBERT M	EF	CONSULTANT (5 USC 3109)
CDRH	LEVINE, MARTIN	EF	CONSULTANT (5 USC 3109)
CDRH	LEVINE, MARTIN	EF	CONSULTANT (5 USC 3109)
CDRH	LEVINSON, MARK M	EF	CONSULTANT (5 USC 3109)
CDRH	LEVINSON, MARK M	EF	CONSULTANT (5 USC 3109)
CDRH	LEVISON, SANDRA J	EF	CONSULTANT (5 USC 3109)
CDRH	LEVISON, SANDRA J	EF	CONSULTANT (5 USC 3109)
CDRH	LEVY, BARBARA S	EF	CONSULTANT (5 USC 3109)
CDRH	LEVY, BARBARA S	EF	CONSULTANT (5 USC 3109)
CDRH	LEWIN, PETER A	EF	CONSULTANT (5 USC 3109)
CDRH	LEWIN, PETER A	EF	CONSULTANT (5 USC 3109)
CDRH	LISTGARTEN, MAX A	EF	CONSULTANT (5 USC 3109)
CDRH	LISTGARTEN, MAX A	EF	CONSULTANT (5 USC 3109)
CDRH	LOVELL, MARK A	EF	CONSULTANT (5 USC 3109)
CDRH	LOVELL, MARK A	EF	CONSULTANT (5 USC 3109)
CDRH	LOVELL, SANDRA L	EF	CONSULTANT (5 USC 3109)
CDRH	LOVELL, SANDRA L	EF	CONSULTANT (5 USC 3109)
CDRH	LYNCH, JOHN B	EF	CONSULTANT (5 USC 3109)
CDRH	LYNCH, JOHN B	EF	CONSULTANT (5 USC 3109)
CDRH	MACINTYRE, WILLIAM J	EF	CONSULTANT (5 USC 3109)
CDRH	MACINTYRE, WILLIAM J	EF	CONSULTANT (5 USC 3109)
CDRH	MACRAE, SCOTT M	EF	CONSULTANT (5 USC 3109)
CDRH	MACRAE, SCOTT M	EF	CONSULTANT (5 USC 3109)
CDRH	MACSAI, MARIAN S	EF	CONSULTANT (5 USC 3109)
CDRH	MACSAI, MARIAN S	EF	CONSULTANT (5 USC 3109)
CDRH	MARCUS, CAROL S	EF	CONSULTANT (5 USC 3109)
CDRH	MARCUS, CAROL S	EF	CONSULTANT (5 USC 3109)
CDRH	MARGULIES, STANLEY I	EF	CONSULTANT (5 USC 3109)
CDRH	MARGULIES, STANLEY I	EF	CONSULTANT (5 USC 3109)
CDRH	MARTIN, HORACE F	EF	CONSULTANT (5 USC 3109)
CDRH	MARTIN, HORACE F	EF	CONSULTANT (5 USC 3109)

CDRH	MATANOSKI, GENEVIEVE M	EF	CONSULTANT (5 USC 3109)
CDRH	MATANOSKI, GENEVIEVE M	EF	CONSULTANT (5 USC 3109)
CDRH	MAYOR, MICHAEL B	EF	CONSULTANT (5 USC 3109)
CDRH	MAYOR, MICHAEL B	EF	CONSULTANT (5 USC 3109)
CDRH	MC CULLEY, JAMES P	EF	CONSULTANT (5 USC 3109)
CDRH	MC CULLEY, JAMES P	EF	CONSULTANT (5 USC 3109)
CDRH	MCCAULEY, ROBERT L	EF	CONSULTANT (5 USC 3109)
CDRH	MCGOWAN, JOHN E	EF	CONSULTANT (5 USC 3109)
CDRH	MCGOWAN, JOHN E	EF	CONSULTANT (5 USC 3109)
CDRH	MCGOWAN, LARRY	EF	CONSULTANT (5 USC 3109)
CDRH	MCGOWAN, LARRY	EF	CONSULTANT (5 USC 3109)
CDRH	MCGUIRE, SHEILA M	EF	CONSULTANT (5 USC 3109)
CDRH	MCGUIRE, SHEILA M	EF	CONSULTANT (5 USC 3109)
CDRH	MENENDEZ BOTET, CELIA J	EF	CONSULTANT (5 USC 3109)
CDRH	MENENDEZ BOTET, CELIA J	EF	CONSULTANT (5 USC 3109)
CDRH	MERRITT, CHRISTOPHE R	EF	CONSULTANT (5 USC 3109)
CDRH	MERRITT, CHRISTOPHE R	EF	CONSULTANT (5 USC 3109)
CDRH	MERTEN, DAVID F	EF	CONSULTANT (5 USC 3109)
CDRH	MERTEN, DAVID F	EF	CONSULTANT (5 USC 3109)
CDRH	MILLER III, MILLAGE C	EF	CONSULTANT (5 USC 3109)
CDRH	MILLER III, MILLAGE C	EF	CONSULTANT (5 USC 3109)
CDRH	MIYAMOTO, RICHARD T	EF	CONSULTANT (5 USC 3109)
CDRH	MOHL, NORMAN D	EF	CONSULTANT (5 USC 3109)
CDRH	MOHL, NORMAN D	EF	CONSULTANT (5 USC 3109)
CDRH	MOORE, PAUL H	EF	CONSULTANT (5 USC 3109)
CDRH	MOORE, PAUL H	EF	CONSULTANT (5 USC 3109)
CDRH	MOOSA, HANS H	EF	CONSULTANT (5 USC 3109)
CDRH	MOOSA, HANS H	EF	CONSULTANT (5 USC 3109)
CDRH	MORREY, BERNARD F	EF	CONSULTANT (5 USC 3109)
CDRH	MORREY, BERNARD F	EF	CONSULTANT (5 USC 3109)
CDRH	MORYKWA, MICHAEL J	EF	CONSULTANT (5 USC 3109)

CDRH	NAGEY, DAVID A	EF	CONSULTANT (5 USC 3109)
CDRH	NAGEY, DAVID A	EF	CONSULTANT (5 USC 3109)
CDRH	NANDA, NAVIN C	EF	CONSULTANT (5 USC 3109)
CDRH	NANDA, NAVIN C	EF	CONSULTANT (5 USC 3109)
CDRH	NELSON, ROGER M	EF	CONSULTANT (5 USC 3109)
CDRH	NELSON, ROGER M	EF	CONSULTANT (5 USC 3109)
CDRH	NIPPER, HENRY C	EF	CONSULTANT (5 USC 3109)
CDRH	NIPPER, HENRY C	EF	CONSULTANT (5 USC 3109)
CDRH	NISHIOKA, NORMAN S	EF	CONSULTANT (5 USC 3109)
CDRH	NYBORG, WESLEY L	EF	CONSULTANT (5 USC 3109)
CDRH	NYBORG, WESLEY L	EF	CONSULTANT (5 USC 3109)
CDRH	O NEILL, PEGGY A	EF	CONSULTANT (5 USC 3109)
CDRH	O NEILL, PEGGY A	EF	CONSULTANT (5 USC 3109)
CDRH	OLMSTED, WILLIAM W	EF	CONSULTANT (5 USC 3109)
CDRH	OLMSTED, WILLIAM W	EF	CONSULTANT (5 USC 3109)
CDRH	PARK, JOON B	EF	CONSULTANT (5 USC 3109)
CDRH	PARK, JOON B	EF	CONSULTANT (5 USC 3109)
CDRH	PATTERS, MARK R	EF	CONSULTANT (5 USC 3109)
CDRH	PATTERS, MARK R	EF	CONSULTANT (5 USC 3109)
CDRH	PENN, RICHARD D	EF	CONSULTANT (5 USC 3109)
CDRH	PENN, RICHARD D	EF	CONSULTANT (5 USC 3109)
CDRH	PERLER, BRUCE A	EF	CONSULTANT (5 USC 3109)
CDRH	PERLMUTTER, JOHANNA F	EF	CONSULTANT (5 USC 3109)
CDRH	PERLMUTTER, JOHANNA F	EF	CONSULTANT (5 USC 3109)
CDRH	POTCHEN, E JAMES	EF	CONSULTANT (5 USC 3109)
CDRH	POTCHEN, E JAMES	EF	CONSULTANT (5 USC 3109)
CDRH	PRIEST, JEAN H	EF	CONSULTANT (5 USC 3109)
CDRH	PRIEST, JEAN H	EF	CONSULTANT (5 USC 3109)
CDRH	RAJA, SRINIVASA N	EF	CONSULTANT (5 USC 3109)
CDRH	REAMAN, GREGORY H	EF	CONSULTANT (5 USC 3109)
CDRH	REAMAN, GREGORY H	EF	CONSULTANT (5 USC 3109)

CDRH	REGER, STEVEN I	EF	CONSULTANT (5 USC 3109)
CDRH	REGER, STEVEN I	EF	CONSULTANT (5 USC 3109)
CDRH	REID, RICHARD I	EF	CONSULTANT (5 USC 3109)
CDRH	REID, RICHARD I	EF	CONSULTANT (5 USC 3109)
CDRH	REJ, ROBERT H	EF	CONSULTANT (5 USC 3109)
CDRH	REJ, ROBERT H	EF	CONSULTANT (5 USC 3109)
CDRH	RELLER, LYMAN B	EF	CONSULTANT (5 USC 3109)
CDRH	RELLER, LYMAN B	EF	CONSULTANT (5 USC 3109)
CDRH	ROBERTSON, PAUL B	EF	CONSULTANT (5 USC 3109)
CDRH	ROBERTSON, PAUL B	EF	CONSULTANT (5 USC 3109)
CDRH	ROBINSON, JOHN A	EF	CONSULTANT (5 USC 3109)
CDRH	ROBINSON, JOHN A	EF	CONSULTANT (5 USC 3109)
CDRH	ROESER, ROSS J	EF	CONSULTANT (5 USC 3109)
CDRH	ROESER, ROSS J	EF	CONSULTANT (5 USC 3109)
CDRH	ROIZEN, MICHAEL F	EF	CONSULTANT (5 USC 3109)
CDRH	ROIZEN, MICHAEL F	EF	CONSULTANT (5 USC 3109)
CDRH	ROSS, MARK	EF	CONSULTANT (5 USC 3109)
CDRH	ROSS, MARK	EF	CONSULTANT (5 USC 3109)
CDRH	RUBIN, GARY S	EF	CONSULTANT (5 USC 3109)
CDRH	RUBIN, GARY S	EF	CONSULTANT (5 USC 3109)
CDRH	RUZEK, SHERYL B	EF	CONSULTANT (5 USC 3109)
CDRH	RUZEK, SHERYL B	EF	CONSULTANT (5 USC 3109)
CDRH	SADLER, JOHN H	EF	CONSULTANT (5 USC 3109)
CDRH	SADLER, JOHN H	EF	CONSULTANT (5 USC 3109)
CDRH	SANDAK, JOEL S	EF	CONSULTANT (5 USC 3109)
CDRH	SANDAK, JOEL S	EF	CONSULTANT (5 USC 3109)
CDRH	SAVITT, EUGENE D	EF	CONSULTANT (5 USC 3109)
CDRH	SAVITT, EUGENE D	EF	CONSULTANT (5 USC 3109)
CDRH	SAXE, STANLEY R	EF	CONSULTANT (5 USC 3109)

CDRH	SAXE, STANLEY R	EF	CONSULTANT (5 USC 3109)
CDRH	SCHNIDER, CRISTINA M	EF	CONSULTANT (5 USC 3109)
CDRH	SCHNIDER, CRISTINA M	EF	CONSULTANT (5 USC 3109)
CDRH	SEDLACEK, THOMAS V	EF	CONSULTANT (5 USC 3109)
CDRH	SEDLACEK, THOMAS V	EF	CONSULTANT (5 USC 3109)
CDRH	SHAIN, ROCHELLE N	EF	CONSULTANT (5 USC 3109)
CDRH	SHAIN, ROCHELLE N	EF	CONSULTANT (5 USC 3109)
CDRH	SHORT, BILLIE L	EF	CONSULTANT (5 USC 3109)
CDRH	SIEGEL, BARRY A	EF	CONSULTANT (5 USC 3109)
CDRH	SIEGEL, BARRY A	EF	CONSULTANT (5 USC 3109)
CDRH	SILVER, LARRY B	EF	CONSULTANT (5 USC 3109)
CDRH	SILVER, LARRY B	EF	CONSULTANT (5 USC 3109)
CDRH	SIMMONS, JACQUELINE R	EF	CONSULTANT (5 USC 3109)
CDRH	SIMMONS, JACQUELINE R	EF	CONSULTANT (5 USC 3109)
CDRH	SIMMONS, TONY W	EF	CONSULTANT (5 USC 3109)
CDRH	SIMMONS, TONY W	EF	CONSULTANT (5 USC 3109)
CDRH	SINGH, SHAILINI	EF	CONSULTANT (5 USC 3109)
CDRH	SINGH, SHAILINI	EF	CONSULTANT (5 USC 3109)
CDRH	SLOTS, JORGEN	EF	CONSULTANT (5 USC 3109)
CDRH	SLOTS, JORGEN	EF	CONSULTANT (5 USC 3109)
CDRH	SMITH, ALICE L	EF	CONSULTANT (5 USC 3109)
CDRH	SMITH, ALICE L	EF	CONSULTANT (5 USC 3109)
CDRH	SODERSTROM, RICHARD M	EF	CONSULTANT (5 USC 3109)
CDRH	SODERSTROM, RICHARD M	EF	CONSULTANT (5 USC 3109)
CDRH	SOHN, DAVID	EF	CONSULTANT (5 USC 3109)
CDRH	SOHN, DAVID	EF	CONSULTANT (5 USC 3109)
CDRH	SOMERMAN, MARTHA J	EF	CONSULTANT (5 USC 3109)
CDRH	SOMERMAN, MARTHA J	EF	CONSULTANT (5 USC 3109)
CDRH	SPANGBERG, LARZ S	EF	CONSULTANT (5 USC 3109)
CDRH	SPANGBERG, LARZ S	EF	CONSULTANT (5 USC 3109)
CDRH	SPECTER, STEVEN C	EF	CONSULTANT (5 USC 3109)

CDRH	SPECTER, STEVEN C	EF	CONSULTANT (5 USC 3109)
CDRH	SPECTOR, MYRON	EF	CONSULTANT (5 USC 3109)
CDRH	SPIEGEL, HERBERT E	EF	CONSULTANT (5 USC 3109)
CDRH	SPIEGEL, HERBERT E	EF	CONSULTANT (5 USC 3109)
CDRH	STARK, WALTER J	EF	CONSULTANT (5 USC 3109)
CDRH	STARK, WALTER J	EF	CONSULTANT (5 USC 3109)
CDRH	STEINBACH, JOSEPH H	EF	CONSULTANT (5 USC 3109)
CDRH	STEINBACH, JOSEPH H	EF	CONSULTANT (5 USC 3109)
CDRH	STEPHENS, WILLIE L	EF	CONSULTANT (5 USC 3109)
CDRH	STEPHENS, WILLIE L	EF	CONSULTANT (5 USC 3109)
CDRH	STEVENS, HAROLD	EF	CONSULTANT (5 USC 3109)
CDRH	STEVENS, HAROLD	EF	CONSULTANT (5 USC 3109)
CDRH	SUGAR, ALAN	EF	CONSULTANT (5 USC 3109)
CDRH	SUGAR, ALAN	EF	CONSULTANT (5 USC 3109)
CDRH	SUZUKI, JON B	EF	CONSULTANT (5 USC 3109)
CDRH	SUZUKI, JON B	EF	CONSULTANT (5 USC 3109)
CDRH	TENENBAUM, HOWARD C	EF	CONSULTANT (5 USC 3109)
CDRH	TENENBAUM, HOWARD C	EF	CONSULTANT (5 USC 3109)
CDRH	TORZILLI, PETER A	EF	CONSULTANT (5 USC 3109)
CDRH	TORZILLI, PETER A	EF	CONSULTANT (5 USC 3109)
CDRH	TUAZON, CARMELITA U	EF	CONSULTANT (5 USC 3109)
CDRH	TUAZON, CARMELITA U	EF	CONSULTANT (5 USC 3109)
CDRH	VENES, JOAN L	EF	CONSULTANT (5 USC 3109)
CDRH	WAGER, GAEL P	EF	CONSULTANT (5 USC 3109)
CDRH	WAGER, GAEL P	EF	CONSULTANT (5 USC 3109)
CDRH	WALLIN, JOHN D	EF	CONSULTANT (5 USC 3109)
CDRH	WALLIN, JOHN D	EF	CONSULTANT (5 USC 3109)
CDRH	WALLIN, JOHN D	EF	CONSULTANT (5 USC 3109)
CDRH	WATSON, MICHAEL S	EF	CONSULTANT (5 USC 3109)
CDRH	WATSON, MICHAEL S	EF	CONSULTANT (5 USC 3109)
CDRH	WEG, JOHN G	EF	CONSULTANT (5 USC 3109)

CDRH	WEG, JOHN G	EF	CONSULTANT (5 USC 3109)
CDRH	WEISMAN, MICHAEL H	EF	CONSULTANT (5 USC 3109)
CDRH	WEISMAN, MICHAEL H	EF	CONSULTANT (5 USC 3109)
CDRH	WHITECLOUD, THOMAS S	EF	CONSULTANT (5 USC 3109)
CDRH	WHITECLOUD, THOMAS S	EF	CONSULTANT (5 USC 3109)
CDRH	WHITEHOUSE, FRED W	EF	CONSULTANT (5 USC 3109)
CDRH	WHITEHOUSE, FRED W	EF	CONSULTANT (5 USC 3109)
CDRH	WHOLEY, MARK H	EF	CONSULTANT (5 USC 3109)
CDRH	WILKINSON, CHARLES P	EF	CONSULTANT (5 USC 3109)
CDRH	WILKINSON, CHARLES P	EF	CONSULTANT (5 USC 3109)
CDRH	WILKINSON, HAROLD A	EF	CONSULTANT (5 USC 3109)
CDRH	WONG, FRANKLIN C	EF	CONSULTANT (5 USC 3109)
CDRH	WOODS, KAREN L	EF	CONSULTANT (5 USC 3109)
CDRH	WOODS, KAREN L	EF	CONSULTANT (5 USC 3109)
CDRH	WOODSON, GAYLE E	EF	CONSULTANT (5 USC 3109)
CDRH	WU YUAN, CHRISTINE D	EF	CONSULTANT (5 USC 3109)
CDRH	WU YUAN, CHRISTINE D	EF	CONSULTANT (5 USC 3109)
CDRH	YAMANASHI, WILLIAM S	EF	CONSULTANT (5 USC 3109)
CDRH	YAMANASHI, WILLIAM S	EF	CONSULTANT (5 USC 3109)
CDRH	YUAN, HANSEN A	EF	CONSULTANT (5 USC 3109)
CDRH	YUAN, HANSEN A	EF	CONSULTANT (5 USC 3109)
CDRH	ZARINS, BERTRAM	EF	CONSULTANT (5 USC 3109)
CDRH	ZARINS, BERTRAM	EF	CONSULTANT (5 USC 3109)
CDRH	ZUCKERMAN, GARY R	EF	CONSULTANT (5 USC 3109)
CDRH	ZUCKERMAN, GARY R	EF	CONSULTANT (5 USC 3109)
CDRH	CURRO, FREDERICK A	EH	ADVISORY COMMITTEE MEMBER (5 USC 3109)
CDRH	CURRO, FREDERICK A	EH	ADVISORY COMMITTEE MEMBER (5 USC 3109)
CDRH	ALLEN, STEPHEN D	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	ALLEN, STEPHEN D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BARKIN, JAMIE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BARKIN, JAMIE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BASSETT, LAWRENCE W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BASSETT, LAWRENCE W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BASSFORD, TAMSEN L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BASSFORD, TAMSEN L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BAUER, THOMAS W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BAUER, THOMAS W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BIRDSONG, GEORGE G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BIRDSONG, GEORGE G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BLANCO, JORGE D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BLANCO, JORGE D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOTSCO, MARGARET A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOTSCO, MARGARET A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOUGHMAN, JOANN A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOUGHMAN, JOANN A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOUWSMA, OTIS J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOUWSMA, OTIS J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOWEN, WILLIAM H	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	BOWEN, WILLIAM H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOYCE, STEVEN T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BOYCE, STEVEN T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BREADY, LOIS L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BREADY, LOIS L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BREZOVICH, IVAN A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BREZOVICH, IVAN A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BRINKER, JEFFREY A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BRINKER, JEFFREY A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BRUCKER, ALEXANDER J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BRUCKER, ALEXANDER J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BUCHWALD, HENRY	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BUCHWALD, HENRY	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BUTLER, PRISCILLA F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	BUTLER, PRISCILLA F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	CALHOUN, KAREN H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	CALHOUN, KAREN H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	CALIA, FRANK M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	CALIA, FRANK M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	CARTY, CLAUDIA L	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	CARTY, CLAUDIA L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	CLANCY, JOAN B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	CLANCY, JOAN B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	COBBS, ELIZABETH L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	COBBS, ELIZABETH L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	COUNTEE, ROGER W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	COUNTEE, ROGER W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DEBOR, MARYDALE	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DEBOR, MARYDALE	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DEFOREST, ADAMADIA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DEFOREST, ADAMADIA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DEJOSEPH, JEANNE F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DOUGHMAN, DONALD J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DOUGHMAN, DONALD J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DOYLE, KAREN J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DOYLE, KAREN J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DUNCAN, TITUS D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DUNCAN, TITUS D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DYER, ELIZABETH C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	DYER, ELIZABETH C	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	ECHT, DEBRA S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ECHT, DEBRA S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	EDELSTEIN, PAUL H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	EGLINGTON, GARY S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	EGLINGTON, GARY S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	EISENACH, KATHLEEN D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	EISENACH, KATHLEEN D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ELIAS, ELIAS G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ELIAS, ELIAS G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	EMBERTON, LUCILLE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	EMBERTON, LUCILLE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	FERGUSON PELL, MARTIN W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	FISCHER, PAUL B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	FISCHER, PAUL B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	FRAZIER, PERLEY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	FRAZIER, PERLEY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GLASSMAN, ARMAND B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GLASSMAN, ARMAND B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GLICK, ROBERTA P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GLICK, ROBERTA P	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	GOLDSMITH, BARBARA M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GOLDSMITH, BARBARA M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GOLDSTEIN, BRAHM N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GOLDSTEIN, BRAHM N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GOLDSTICK, THOMAS K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GREENSPAN, DEBORAH S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GREENWALD, A SETH	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GREENWALD, A SETH	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GULYA, AINA J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	GULYA, AINA J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HACKNEY, DAVID B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HACKNEY, DAVID B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HALBERG, FRANCINE E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HALBERG, FRANCINE E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HANLEY, EDWARD N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HANLEY, EDWARD N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HARRIS, JULES E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HARRIS, JULES E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HEINLEIN, RITA W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HEINLEIN, RITA W	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	HENDRICK, ROBERT E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HENDRICK, ROBERT E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HOLLINSHEAD, ARIEL C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HOLLINSHEAD, ARIEL C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HUNTER, PATRICK T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	HUNTER, PATRICK T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	JETER, KATHERINE F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	JETER, KATHERINE F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	JONES, GEORGE W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	JONES, GEORGE W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KALLOO, ANTHONY N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KALLOO, ANTHONY N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KARMEN, ARTHUR	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KARMEN, ARTHUR	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KEMENY, MARY M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KEMENY, MARY M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KIPPEL, EDWARD A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KIPPEL, EDWARD A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KIRTON, ORLANDO C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KIRTON, ORLANDO C	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	KOKOSKY, MARY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KOKOSKY, MARY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KURT, THOMAS L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	KURT, THOMAS L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	LANGER, AMY S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	LANGER, AMY S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	LEUNG, JACQUELINE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	LEUNG, JACQUELINE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	LINDER, JAMES R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	LINDER, JAMES R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	LINVER, MICHAEL N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	LINVER, MICHAEL N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MAPLES, KAREN E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MAPLES, KAREN E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MARKOLF, KEITH L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MARKOLF, KEITH L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MARKOWITZ, HAROLD	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MARKOWITZ, HAROLD	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MCCASKILLSTEVENS, WORTA J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MCCASKILLSTEVENS, WORTA J	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	MCCAULEY, ROBERT L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MCCLELLAND, ELEANOR	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MCCLELLAND, ELEANOR	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MCGRATH, MARY H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MCGRATH, MARY H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MCINTYRE, MARK E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MCINTYRE, MARK E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MELMAN, ARNOLD	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MELMAN, ARNOLD	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MORROW, MONICA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MORROW, MONICA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MUELLER, ROBERT A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MUELLER, ROBERT A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MURRAY, DAVID G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	MURRAY, DAVID G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NEAL COOPER, FLORENCE J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NEAL COOPER, FLORENCE J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NEUMAN, MICHAEL R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NEUMAN, MICHAEL R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NORBACK, DIANE H	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	NORBACK, DIANE H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NORMAN, RICHARD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NORMAN, RICHARD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NOSANCHUK, JEROME S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NOSANCHUK, JEROME S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NOWLING, STEVEN P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NOWLING, STEVEN P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NURU, NJERI	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NURU, NJERI	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NUWER, MARC R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	NUWER, MARC R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	O MARA, ELLEN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	O MARA, ELLEN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	OAKLEY, MARSHA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	PATOW, CARL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	PATOW, CARL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	PATTERSON, ELIZABETH A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	PATTERSON, ELIZABETH A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	PIANTADOSI, STEVEN	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	PIANTADOSI, STEVEN	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	RANGASWAMY, LEELA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RANGASWAMY, LEELA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	REVERBY, SUSAN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	REVERBY, SUSAN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RODRIGUEZ, LUIS A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RODRIGUEZ, LUIS A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ROMERO FACEY, MARIA N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ROMERO FACEY, MARIA N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ROSAN, BURTON	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ROSAN, BURTON	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ROSENTHAL, DOROTHY L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ROSENTHAL, DOROTHY L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RUBEN, ROBERT J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RUBEN, ROBERT J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RUFF, WILLIE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RUFF, WILLIE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RUIZ, RICHARD S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	RUIZ, RICHARD S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SATEREN, STANLEY G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SATEREN, STANLEY G	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	SAVAGE, RICHARD A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SAVAGE, RICHARD A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SCIAMMARELLA, ESTHER E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SCIAMMARELLA, ESTHER E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SELTZER, VICKI L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SELTZER, VICKI L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SERDAREVIC, OLIVIA N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SERDAREVIC, OLIVIA N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SESSION, JOSEPHINE W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SESSION, JOSEPHINE W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SHACKS, SAMUEL J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SHACKS, SAMUEL J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SHORT, BILLIE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SLUTSKY, ARTHUR S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SLUTSKY, ARTHUR S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SMITH, ROBERT A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SMITH, ROBERT A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SONI, PREM S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SONI, PREM S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SPECTOR, MYRON	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	STULTING, ROBERT D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	STULTING, ROBERT D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SUNG, FUNG CHANG	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SUNG, FUNG CHANG	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SWAIN, JULIE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	SWAIN, JULIE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	THRUPP, LAURI D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	THRUPP, LAURI D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	TODD, MARY B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	TODD, MARY B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	TOPOL, ERIC J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	TREVES, S T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	TREVES, S T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	VERTUNO, LEONARD L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	VERTUNO, LEONARD L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	WEINTRAUB, RONALD M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	WEINTRAUB, RONALD M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	WHITELEY, GORDON R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	WHITELEY, GORDON R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	WHOLEY, MARK H	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRH	WILKINSON, HAROLD A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	WORTHINGTON, DON W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	WORTHINGTON, DON W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ZAMORANO, LUCIA J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRH	ZAMORANO, LUCIA J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BAKRIS, GEORGE L	ED	EXPERT (5 USC 3109)
CDRUG	BANKS, ALPHA T	ED	EXPERT (5 USC 3109)
CDRUG	BAUM, CARLENE S	ED	EXPERT (5 USC 3109)
CDRUG	BEPG, LEONARD	ED	EXPERT (5 USC 3109)
CDRUG	BLUM, RICHARD S	ED	EXPERT (5 USC 3109)
CDRUG	BROOKE, MICHAEL H	ED	EXPERT (5 USC 3109)
CDRUG	CAPLAN, LOUIS R	ED	EXPERT (5 USC 3109)
CDRUG	CHINCHILLI, VERNON M	ED	EXPERT (5 USC 3109)
CDRUG	DAGOSTINO, RALPH B	ED	EXPERT (5 USC 3109)
CDRUG	DAILEY, JOHN W	ED	EXPERT (5 USC 3109)
CDRUG	DEWIT, HARRIET	ED	EXPERT (5 USC 3109)
CDRUG	DRACHMAN, DAVID A	ED	EXPERT (5 USC 3109)
CDRUG	DUNN, JUDITH K	ED	EXPERT (5 USC 3109)
CDRUG	EHRlich, GEORGE E	ED	EXPERT (5 USC 3109)
CDRUG	EISENACH, JAMES C	ED	EXPERT (5 USC 3109)
CDRUG	FERRIS, STEVEN H	ED	EXPERT (5 USC 3109)
CDRUG	FINN, RONALD D	ED	EXPERT (5 USC 3109)
CDRUG	FISHER, LLOYD D	ED	EXPERT (5 USC 3109)
CDRUG	FISHMAN, HARVEY M	ED	EXPERT (5 USC 3109)
CDRUG	FRIEDMAN, BASIL A	ED	EXPERT (5 USC 3109)
CDRUG	FRISHMAN, WILLIAM H	ED	EXPERT (5 USC 3109)
CDRUG	GARSON, ARTHUR	ED	EXPERT (5 USC 3109)
CDRUG	GILLILAN, RONALD E	ED	EXPERT (5 USC 3109)

CDRUG	GRASSI, DANIEL D	ED	EXPERT (5 USC 3109)
CDRUG	GRONERT, GERALD A	ED	EXPERT (5 USC 3109)
CDRUG	HAMER, ROBERT M	ED	EXPERT (5 USC 3109)
CDRUG	HARPER, MARILYN H	ED	EXPERT (5 USC 3109)
CDRUG	HARRELL, FRANK E	ED	EXPERT (5 USC 3109)
CDRUG	HARRIS, ROBERT H	ED	EXPERT (5 USC 3109)
CDRUG	HERTZBERG, VICKI S	ED	EXPERT (5 USC 3109)
CDRUG	HOLFORD, NICHOLAS H	ED	EXPERT (5 USC 3109)
CDRUG	HULKA, BARBARA S	ED	EXPERT (5 USC 3109)
CDRUG	JOHNSON, MARK D	ED	EXPERT (5 USC 3109)
CDRUG	JUHL, RANDY P	ED	EXPERT (5 USC 3109)
CDRUG	LAKE, CAROL L	ED	EXPERT (5 USC 3109)
CDRUG	LANDESMAN, RENEE K	ED	EXPERT (5 USC 3109)
CDRUG	LARSON, CHARLES P	ED	EXPERT (5 USC 3109)
CDRUG	LATHERS, CLAIRE M	ED	EXPERT (5 USC 3109)
CDRUG	MANNING, RONALD G	ED	EXPERT (5 USC 3109)
CDRUG	MEIER, PAUL	ED	EXPERT (5 USC 3109)
CDRUG	MERIN, ROBERT G	ED	EXPERT (5 USC 3109)
CDRUG	MILLER JR, EDWARD D	ED	EXPERT (5 USC 3109)
CDRUG	MILLER, RONALD D	ED	EXPERT (5 USC 3109)
CDRUG	MOORE, MARY E	ED	EXPERT (5 USC 3109)
CDRUG	MORGANROTH, JOEL	ED	EXPERT (5 USC 3109)
CDRUG	NG, TIE HUA	ED	EXPERT (5 USC 3109)
CDRUG	PARK, KAREN M	ED	EXPERT (5 USC 3109)
CDRUG	PINSKY, PAUL F	ED	EXPERT (5 USC 3109)
CDRUG	RISHER FLOWERS, DEBRA L	ED	EXPERT (5 USC 3109)
CDRUG	RODMAN, JOHN H	ED	EXPERT (5 USC 3109)
CDRUG	ROIZEN, MICHAEL F	ED	EXPERT (5 USC 3109)
CDRUG	ROSENBERG, HENRY B	ED	EXPERT (5 USC 3109)
CDRUG	ROTHSTEIN, PETER T	ED	EXPERT (5 USC 3109)
CDRUG	SAIDMAN, LAWRENCE J	ED	EXPERT (5 USC 3109)

CDRUG	SCHAUF, VICTORIA	ED	EXPERT (5 USC 3109)
CDRUG	SMOLENSKY, MICHAEL H	ED	EXPERT (5 USC 3109)
CDRUG	STANSKI, DONALD R	ED	EXPERT (5 USC 3109)
CDRUG	STEVENS, WENDELL C	ED	EXPERT (5 USC 3109)
CDRUG	SUZUKI, JON B	ED	EXPERT (5 USC 3109)
CDRUG	SWEENEY, KEVIN R	ED	EXPERT (5 USC 3109)
CDRUG	TRENTHAM, DAVID E	ED	EXPERT (5 USC 3109)
CDRUG	WATKINS, WALTER D	ED	EXPERT (5 USC 3109)
CDRUG	WOOD, MARGARET	ED	EXPERT (5 USC 3109)
CDRUG	YATES, FRANCIS E	ED	EXPERT (5 USC 3109)
CDRUG	YORZYK, WILLIAM A	ED	EXPERT (5 USC 3109)
CDRUG	YOUNG, MARIE L	ED	EXPERT (5 USC 3109)
CDRUG	YU, JIA HUEY	ED	EXPERT (5 USC 3109)
CDRUG	ABRAMS, DONALD I	EF	CONSULTANT (5 USC 3109)
CDRUG	ABRAMS, DONALD I	EF	CONSULTANT (5 USC 3109)
CDRUG	AHMANN, DAVID L	EF	CONSULTANT (5 USC 3109)
CDRUG	AHMANN, DAVID L	EF	CONSULTANT (5 USC 3109)
CDRUG	ALARCON, GRACIELA S	EF	CONSULTANT (5 USC 3109)
CDRUG	ARNETT, DONNA K	EF	CONSULTANT (5 USC 3109)
CDRUG	AZEN, STANLEY P	EF	CONSULTANT (5 USC 3109)
CDRUG	AZEN, STANLEY P	EF	CONSULTANT (5 USC 3109)
CDRUG	BELIN, MICHAEL W	EF	CONSULTANT (5 USC 3109)
CDRUG	BENOWITZ, NEAL L	EF	CONSULTANT (5 USC 3109)
CDRUG	BENOWITZ, NEAL L	EF	CONSULTANT (5 USC 3109)
CDRUG	BERGFELD, WILMA F	EF	CONSULTANT (5 USC 3109)
CDRUG	BERRY, FREDERIC A	EF	CONSULTANT (5 USC 3109)
CDRUG	BERRY, FREDERIC A	EF	CONSULTANT (5 USC 3109)
CDRUG	BIGELOW, GEORGE E	EF	CONSULTANT (5 USC 3109)
CDRUG	BLASCHKE, TERRENCE F	EF	CONSULTANT (5 USC 3109)
CDRUG	BLESSING MOORE, JOANN C	EF	CONSULTANT (5 USC 3109)
CDRUG	BLESSING MOORE, JOANN C	EF	CONSULTANT (5 USC 3109)

CDRUG	BONE III, HENRY G	EF	CONSULTANT (5 USC 3109)
CDRUG	BORER, JEFFREY S	EF	CONSULTANT (5 USC 3109)
CDRUG	BORER, JEFFREY S	EF	CONSULTANT (5 USC 3109)
CDRUG	BRATER, DONALD C	EF	CONSULTANT (5 USC 3109)
CDRUG	BRATER, DONALD C	EF	CONSULTANT (5 USC 3109)
CDRUG	BROWN, SUZANNE T	EF	CONSULTANT (5 USC 3109)
CDRUG	BRUNELL, PHILIP A	EF	CONSULTANT (5 USC 3109)
CDRUG	BRUNELL, PHILIP A	EF	CONSULTANT (5 USC 3109)
CDRUG	BURKE, GARY R	EF	CONSULTANT (5 USC 3109)
CDRUG	BURKE, GARY R	EF	CONSULTANT (5 USC 3109)
CDRUG	BURRELL, KENNETH H	EF	CONSULTANT (5 USC 3109)
CDRUG	BURRELL, KENNETH H	EF	CONSULTANT (5 USC 3109)
CDRUG	DALLAHAN, RONALD J	EF	CONSULTANT (5 USC 3109)
CDRUG	DALLAHAN, RONALD J	EF	CONSULTANT (5 USC 3109)
CDRUG	CASPER, REGINA C	EF	CONSULTANT (5 USC 3109)
CDRUG	CASPER, REGINA C	EF	CONSULTANT (5 USC 3109)
CDRUG	CHEESEMAN, SARAH H	EF	CONSULTANT (5 USC 3109)
CDRUG	CHEESEMAN, SARAH H	EF	CONSULTANT (5 USC 3109)
CDRUG	CHEN, DONG SHENG	EF	CONSULTANT (5 USC 3109)
CDRUG	CHEN, DONG SHENG	EF	CONSULTANT (5 USC 3109)
CDRUG	CICERO, THEODORE J	EF	CONSULTANT (5 USC 3109)
CDRUG	CICERO, THEODORE J	EF	CONSULTANT (5 USC 3109)
CDRUG	COLEMAN, RALPH E	EF	CONSULTANT (5 USC 3109)
CDRUG	COLEMAN, RALPH E	EF	CONSULTANT (5 USC 3109)
CDRUG	COLOMBANI, PAUL M	EF	CONSULTANT (5 USC 3109)
CDRUG	COLOMBANI, PAUL M	EF	CONSULTANT (5 USC 3109)
CDRUG	CONCA, DOMINICK M	EF	CONSULTANT (5 USC 3109)
CDRUG	CONCA, DOMINICK M	EF	CONSULTANT (5 USC 3109)
CDRUG	CONNELL, ELIZABETH B	EF	CONSULTANT (5 USC 3109)
CDRUG	CONNELL, ELIZABETH B	EF	CONSULTANT (5 USC 3109)
CDRUG	COOK, DAVID R	EF	CONSULTANT (5 USC 3109)

CDRUG	COOK, DAVID R	EF	CONSULTANT (5 USC 3109)
CDRUG	COTE, CHARLES J	EF	CONSULTANT (5 USC 3109)
CDRUG	COTE, CHARLES J	EF	CONSULTANT (5 USC 3109)
CDRUG	CRIM, COURTNEY	EF	CONSULTANT (5 USC 3109)
CDRUG	CRIM, COURTNEY	EF	CONSULTANT (5 USC 3109)
CDRUG	DEDO, DOUGLAS D	EF	CONSULTANT (5 USC 3109)
CDRUG	DEDO, DOUGLAS D	EF	CONSULTANT (5 USC 3109)
CDRUG	DI BISCEGLIE, ADRIAN M	EF	CONSULTANT (5 USC 3109)
CDRUG	DUNLAP, FRANK E	EF	CONSULTANT (5 USC 3109)
CDRUG	EARNEST, DAVID L	EF	CONSULTANT (5 USC 3109)
CDRUG	EARNEST, DAVID L	EF	CONSULTANT (5 USC 3109)
CDRUG	EDWARDS, KATHRYN M	EF	CONSULTANT (5 USC 3109)
CDRUG	EGGLESTON, PEYTON A	EF	CONSULTANT (5 USC 3109)
CDRUG	EGGLESTON, PEYTON A	EF	CONSULTANT (5 USC 3109)
CDRUG	ETTENGER, ROBERT B	EF	CONSULTANT (5 USC 3109)
CDRUG	ETTENGER, ROBERT B	EF	CONSULTANT (5 USC 3109)
CDRUG	FLEISHER, GARY R	EF	CONSULTANT (5 USC 3109)
CDRUG	FLEISHER, GARY R	EF	CONSULTANT (5 USC 3109)
CDRUG	FLEISS, JOSEPH L	EF	CONSULTANT (5 USC 3109)
CDRUG	FLEISS, JOSEPH L	EF	CONSULTANT (5 USC 3109)
CDRUG	FUCHS, SUSAN M	EF	CONSULTANT (5 USC 3109)
CDRUG	FUCHS, SUSAN M	EF	CONSULTANT (5 USC 3109)
CDRUG	GANDHI, RAJINDER P	EF	CONSULTANT (5 USC 3109)
CDRUG	GANDHI, RAJINDER P	EF	CONSULTANT (5 USC 3109)
CDRUG	GARCIA, ERNEST V	EF	CONSULTANT (5 USC 3109)
CDRUG	GARCIA, ERNEST V	EF	CONSULTANT (5 USC 3109)
CDRUG	GEISSER, SEYMOUR	EF	CONSULTANT (5 USC 3109)
CDRUG	GEISSER, SEYMOUR	EF	CONSULTANT (5 USC 3109)
CDRUG	GENCO, ROBERT J	EF	CONSULTANT (5 USC 3109)
CDRUG	GENCO, ROBERT J	EF	CONSULTANT (5 USC 3109)
CDRUG	GENUTH, SAUL M	EF	CONSULTANT (5 USC 3109)

CDRUG	JENUTH, SAUL M	EF	CONSULTANT (5 USC 3109)
CDRUG	JILMAN, SID	EF	CONSULTANT (5 USC 3109)
CDRUG	JILMAN, SID	EF	CONSULTANT (5 USC 3109)
CDRUG	JLASSER, STEPHEN P	EF	CONSULTANT (5 USC 3109)
CDRUG	JO, VAY LIANG W	EF	CONSULTANT (5 USC 3109)
CDRUG	GRAMMER, LESLIE C	EF	CONSULTANT (5 USC 3109)
CDRUG	GRINES, CINDY	EF	CONSULTANT (5 USC 3109)
CDRUG	GRINES, CINDY	EF	CONSULTANT (5 USC 3109)
CDRUG	HAMER, ROBERT M	EF	CONSULTANT (5 USC 3109)
CDRUG	HANAUER, STEPHEN B	EF	CONSULTANT (5 USC 3109)
CDRUG	HANAUER, STEPHEN B	EF	CONSULTANT (5 USC 3109)
CDRUG	HARBER, LEONARD C	EF	CONSULTANT (5 USC 3109)
CDRUG	HARWOOD, ANDREW R	EF	CONSULTANT (5 USC 3109)
CDRUG	HARWOOD, ANDREW R	EF	CONSULTANT (5 USC 3109)
CDRUG	HAUGHTON, VICTOR M	EF	CONSULTANT (5 USC 3109)
CDRUG	HAUGHTON, VICTOR M	EF	CONSULTANT (5 USC 3109)
CDRUG	HENDELES, LESLIE S	EF	CONSULTANT (5 USC 3109)
CDRUG	HONG, WAUN KI	EF	CONSULTANT (5 USC 3109)
CDRUG	HONG, WAUN KI	EF	CONSULTANT (5 USC 3109)
CDRUG	HUGHES, WALTER T	EF	CONSULTANT (5 USC 3109)
CDRUG	HUGHES, WALTER T	EF	CONSULTANT (5 USC 3109)
CDRUG	HUNSICKER, LAWRENCE G	EF	CONSULTANT (5 USC 3109)
CDRUG	HUNSICKER, LAWRENCE G	EF	CONSULTANT (5 USC 3109)
CDRUG	JABS, DOUGLAS A	EF	CONSULTANT (5 USC 3109)
CDRUG	JENNE, JOHN W	EF	CONSULTANT (5 USC 3109)
CDRUG	JOBE, ALAN H	EF	CONSULTANT (5 USC 3109)
CDRUG	JOBE, ALAN H	EF	CONSULTANT (5 USC 3109)
CDRUG	KAHAN, BARRY D	EF	CONSULTANT (5 USC 3109)
CDRUG	KAHAN, BARRY D	EF	CONSULTANT (5 USC 3109)
CDRUG	KAPLAN, MARSHALL M	EF	CONSULTANT (5 USC 3109)

CDRUG	KATZ, DIANE	EF	CONSULTANT (5 USC 3109)
CDRUG	KATZ, DIANE	EF	CONSULTANT (5 USC 3109)
CDRUG	KEMENY, NANCY E	EF	CONSULTANT (5 USC 3109)
CDRUG	KEMENY, NANCY E	EF	CONSULTANT (5 USC 3109)
CDRUG	KLUGE, RONICA M	EF	CONSULTANT (5 USC 3109)
CDRUG	KLUGE, RONICA M	EF	CONSULTANT (5 USC 3109)
CDRUG	KOFF, RAYMOND S	EF	CONSULTANT (5 USC 3109)
CDRUG	KOFF, RAYMOND S	EF	CONSULTANT (5 USC 3109)
CDRUG	KOLLIAS, NIKIFOROS	EF	CONSULTANT (5 USC 3109)
CDRUG	KOLLIAS, NIKIFOROS	EF	CONSULTANT (5 USC 3109)
CDRUG	KOPP, BERNARD	EF	CONSULTANT (5 USC 3109)
CDRUG	KRENER, PENELOPE K	EF	CONSULTANT (5 USC 3109)
CDRUG	KROOK, JAMES E	EF	CONSULTANT (5 USC 3109)
CDRUG	KROOK, JAMES E	EF	CONSULTANT (5 USC 3109)
CDRUG	KROWN, SUSAN E	EF	CONSULTANT (5 USC 3109)
CDRUG	KROWN, SUSAN E	EF	CONSULTANT (5 USC 3109)
CDRUG	LAMBORN, KATHLEEN R	EF	CONSULTANT (5 USC 3109)
CDRUG	LAMBORN, KATHLEEN R	EF	CONSULTANT (5 USC 3109)
CDRUG	LEMON, STANLEY M	EF	CONSULTANT (5 USC 3109)
CDRUG	LI, JAMES T	EF	CONSULTANT (5 USC 3109)
CDRUG	LI, JAMES T	EF	CONSULTANT (5 USC 3109)
CDRUG	LICKO, VOJTECH	EF	CONSULTANT (5 USC 3109)
CDRUG	LINDSTROM, MARY J	EF	CONSULTANT (5 USC 3109)
CDRUG	LINDSTROM, MARY J	EF	CONSULTANT (5 USC 3109)
CDRUG	LISTGARTEN, MAX A	EF	CONSULTANT (5 USC 3109)
CDRUG	LISTGARTEN, MAX A	EF	CONSULTANT (5 USC 3109)
CDRUG	LOOK, SALLY A	EF	CONSULTANT (5 USC 3109)
CDRUG	LOWENFELS, ALBERT B	EF	CONSULTANT (5 USC 3109)
CDRUG	LOWENFELS, ALBERT B	EF	CONSULTANT (5 USC 3109)
CDRUG	LUDWIG, STEPHEN	EF	CONSULTANT (5 USC 3109)
CDRUG	MALCOLM, ARNOLD W	EF	CONSULTANT (5 USC 3109)

CDRUG	MANN, RICHARD A	EF	CONSULTANT (5 USC 3109)
CDRUG	MANN, RICHARD A	EF	CONSULTANT (5 USC 3109)
CDRUG	MARGOLIN, KIM A	EF	CONSULTANT (5 USC 3109)
CDRUC	MARGOLIN, KIM A	EF	CONSULTANT (5 USC 3109)
CDRUC	MCGUIRE JR, JOSEPH S	EF	CONSULTANT (5 USC 3109)
CDRUC	MCGUIRE JR, JOSEPH S	EF	CONSULTANT (5 USC 3109)
CDRUG	MEIER, PAUL	EF	CONSULTANT (5 USC 3109)
CDRUG	MOLLIVER, MARK E	EF	CONSULTANT (5 USC 3109)
CDRUG	MOSELEY III, THOMAS A	EF	CONSULTANT (5 USC 3109)
CDRUG	MOSELEY III, THOMAS A	EF	CONSULTANT (5 USC 3109)
CDRUG	MURPHY, SHIRLEY J	EF	CONSULTANT (5 USC 3109)
CDRUG	NELSON, HAROLD S	EF	CONSULTANT (5 USC 3109)
CDRUG	NELSON, HAROLD S	EF	CONSULTANT (5 USC 3109)
CDRUG	OZOLS, ROBERT F	EF	CONSULTANT (5 USC 3109)
CDRUG	OZOLS, ROBERT F	EF	CONSULTANT (5 USC 3109)
CDRUG	PACKER, MILTON	EF	CONSULTANT (5 USC 3109)
CDRUG	PACKER, MILTON	EF	CONSULTANT (5 USC 3109)
CDRUG	PARKER, DONALD E	EF	CONSULTANT (5 USC 3109)
CDRUG	PARKER, DONALD E	EF	CONSULTANT (5 USC 3109)
CDRUG	PATHAK, MADHUKAR A	EF	CONSULTANT (5 USC 3109)
CDRUG	PATHAK, MADHUKAR A	EF	CONSULTANT (5 USC 3109)
CDRUG	PATTERSON, ELIZABETH A	EF	CONSULTANT (5 USC 3109)
CDRUC	PELOQUIN, CHARLES A	EF	CONSULTANT (5 USC 3109)
CDRUC	PELOQUIN, CHARLES A	EF	CONSULTANT (5 USC 3109)
CDRUG	PENNEYS, NEAL S	EF	CONSULTANT (5 USC 3109)
CDRUC	PENNEYS, NEAL S	EF	CONSULTANT (5 USC 3109)
CDRUC	PINGLETON, SUSAN K	EF	CONSULTANT (5 USC 3109)
CDRUC	POMERANZ, JEROME R	EF	CONSULTANT (5 USC 3109)
CDRUC	PRATT, CRAIG M	EF	CONSULTANT (5 USC 3109)
CDRUC	PRATT, CRAIG M	EF	CONSULTANT (5 USC 3109)
CDRUC	RAMSEY, RUTH G	EF	CONSULTANT (5 USC 3109)

CDRUG	REMINGTON, JACK S	EF	CONSULTANT (5 USC 3109)
CDRUG	REMINGTON, JACK S	EF	CONSULTANT (5 USC 3109)
CDRUG	RICARTE, GEORGE A	EF	CONSULTANT (5 USC 3109)
CDRUG	RICARTE, GEORGE A	EF	CONSULTANT (5 USC 3109)
CDRUG	ROBERTS, RICHARD B	EF	CONSULTANT (5 USC 3109)
CDRUG	RODRIGUEZ, WILLIAM J	EF	CONSULTANT (5 USC 3109)
CDRUG	RYAN, THOMAS J	EF	CONSULTANT (5 USC 3109)
CDRUG	SACKS, STEPHEN L	EF	CONSULTANT (5 USC 3109)
CDRUG	SACKS, STEPHEN L	EF	CONSULTANT (5 USC 3109)
CDRUG	SANTIAGO, JULIO V	EF	CONSULTANT (5 USC 3109)
CDRUG	SANTIAGO, JULIO V	EF	CONSULTANT (5 USC 3109)
CDRUG	SAVITT, EUGENE D	EF	CONSULTANT (5 USC 3109)
CDRUG	SAVITT, EUGENE D	EF	CONSULTANT (5 USC 3109)
CDRUG	SAXE, STANLEY R	EF	CONSULTANT (5 USC 3109)
CDRUG	SAXE, STANLEY R	EF	CONSULTANT (5 USC 3109)
CDRUG	SCHOOLER, NINA R	EF	CONSULTANT (5 USC 3109)
CDRUG	SCHOOLER, NINA R	EF	CONSULTANT (5 USC 3109)
CDRUG	SHAPIRO, THERESA A	EF	CONSULTANT (5 USC 3109)
CDRUG	SHAPIRO, THERESA A	EF	CONSULTANT (5 USC 3109)
CDRUG	SHEINER, LEWIS B	EF	CONSULTANT (5 USC 3109)
CDRUG	SHIELDS, HELEN M	EF	CONSULTANT (5 USC 3109)
CDRUG	SIEGEL, BARRY A	EF	CONSULTANT (5 USC 3109)
CDRUG	SIEGEL, BARRY A	EF	CONSULTANT (5 USC 3109)
CDRUG	SLOTS, JORGEN	EF	CONSULTANT (5 USC 3109)
CDRUG	SMITH, EDGAR B	EF	CONSULTANT (5 USC 3109)
CDRUG	SMITH, EDGAR B	EF	CONSULTANT (5 USC 3109)
CDRUG	SOLOMKIN, JOSEPH S	EF	CONSULTANT (5 USC 3109)
CDRUG	SOLOMKIN, JOSEPH S	EF	CONSULTANT (5 USC 3109)
CDRUG	STEELE, RUSSELL W	EF	CONSULTANT (5 USC 3109)
CDRUG	STEELE, RUSSELL W	EF	CONSULTANT (5 USC 3109)
CDRUG	STRAIN, JAMES E	EF	CONSULTANT (5 USC 3109)

CDRUG	STRAIN, JAMES E	EF	CONSULTANT (5 USC 3109)
CDRUG	TAYLOR, ADDISON A	EF	CONSULTANT (5 USC 3109)
CDRUG	THORNER, MICHAEL O	EF	CONSULTANT (5 USC 3109)
CDRUG	THORNER, MICHAEL O	EF	CONSULTANT (5 USC 3109)
CDRUG	TSCHEN, JAIME A	EF	CONSULTANT (5 USC 3109)
CDRUG	TSCHEN, JAIME A	EF	CONSULTANT (5 USC 3109)
CDRUG	TUAZON, CARMELITA U	EF	CONSULTANT (5 USC 3109)
CDRUG	TUAZON, CARMELITA U	EF	CONSULTANT (5 USC 3109)
CDRUG	VAN DEVENTER, GARY M	EF	CONSULTANT (5 USC 3109)
CDRUG	VELTRI, JOSEPH C	EF	CONSULTANT (5 USC 3109)
CDRUG	VELTRI, JOSEPH C	EF	CONSULTANT (5 USC 3109)
CDRUG	WATCHA, MEHERNOOR F	EF	CONSULTANT (5 USC 3109)
CDRUG	WAY, WALTER L	EF	CONSULTANT (5 USC 3109)
CDRUG	WEISMAN, MICHAEL H	EF	CONSULTANT (5 USC 3109)
CDRUG	WEISMAN, MICHAEL H	EF	CONSULTANT (5 USC 3109)
CDRUG	WHITLEY, RICHARD J	EF	CONSULTANT (5 USC 3109)
CDRUG	WHITLEY, RICHARD J	EF	CONSULTANT (5 USC 3109)
CDRUG	WILFERT, CATHERINE M	EF	CONSULTANT (5 USC 3109)
CDRUG	WILLIAMS, RICHARD D	EF	CONSULTANT (5 USC 3109)
CDRUG	WILLIAMS, RICHARD D	EF	CONSULTANT (5 USC 3109)
CDRUG	WILSON, STEPHEN	EF	CONSULTANT (5 USC 3109)
CDRUG	WILSON, STEPHEN	EF	CONSULTANT (5 USC 3109)
CDRUG	WINBURY, MARTIN M	EF	CONSULTANT (5 USC 3109)
CDRUG	WU YUAN, CHRISTINE D	EF	CONSULTANT (5 USC 3109)
CDRUG	WU YUAN, CHRISTINE D	EF	CONSULTANT (5 USC 3109)
CDRUG	YUSUF, SALIM	EF	CONSULTANT (5 USC 3109)
CDRUG	ZAWADZKI, JOANNA K	EF	CONSULTANT (5 USC 3109)
CDRUG	PRITCHARD, KATHLEEN I	EH	ADVISORY COMMITTEE MEMBER (5 USC 3109)
CDRUG	ABERNETHY, DARRELL R	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUG	ABERNETHY, DARRELL R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	AHRENS, RICHARD C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ANDERSON, JEFFREY L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ANDERSON, JEFFREY L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ANDRIOLE, VINCENT T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ANDRIOLE, VINCENT T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	AZIMI, PARVIN H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	AZIMI, PARVIN H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BANKS, PETER A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BANKS, PETER A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BERGFELD, WILMA F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BERTINO JR, JOSEPH S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BERTINO JR, JOSEPH S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BONE III, HENRY G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BORHANI, NEMAT O	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BORHANI, NEMAT O	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BRAUNSTEIN, GLENN D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BRAUNSTEIN, GLENN D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BRAZEAU, GAYLE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	BROWN JR, LAWRENCE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUC	BROWN JR, LAWRENCE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	BUNN JR, PAUL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	BUNN JR, PAUL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	BUNTIN, DENISE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	BUNTIN, DENISE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	BURKS II, THOMAS F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	BURKS II, THOMAS F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CARA, JOSE F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CARA, JOSE F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CARSON, SANDRA A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CARSON, SANDRA A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CHOI, DENNIS W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CHOI, DENNIS W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	COHEN, SUSAN A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	COHEN, SUSAN A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	COMER, GAIL M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	COMER, GAIL M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	COPPLE, PEGGY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	COPPLE, PEGGY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	COYLE, PATRICIA K	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUC	COYLE, PATRICIA K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CRITCHLOW, CATHY W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CURLL, MARY G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	CURLL, MARY G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DALING, JANET R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DALING, JANET R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DAVIDIAN, MARIE	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DAVIDSON, EZRA C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DAVIDSON, EZRA C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DEVOUS SR, MICHAEL D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DEVOUS SR, MICHAEL D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DOWNS, JOHN B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DOWNS, JOHN B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DOYLE, TERESA H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DOYLE, TERESA H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DUKES JR, GEORGE E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	DUKES JR, GEORGE E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	EDEKI, TIMI I	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	EHRLICH, GEORGE E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	EHRLICH, GEORGE E	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUG	EISENACH, JAMES C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	EISENACH, JAMES C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ELASHOFF, JANET D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ELASHOFF, JANET D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ELLIS, JOHN E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ELLIS, JOHN E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ERESHEFSKY, LARRY	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ERESHEFSKY, LARRY	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FAHN, STANLEY	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FAHN, STANLEY	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FELSON, DAVID T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FELSON, DAVID T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FERNANDEZ MADRID, FELIX	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FERNANDEZ MADRID, FELIX	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FIENBERG, STEPHEN E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FIENBERG, STEPHEN E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FINAN, MARIAN C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FISHER, LLOYD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FISHER, LLOYD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FISHER, ROSEMARIE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FISHER, ROSEMARIE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUG	FORASTIERE, ARLENE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FORASTIERE, ARLENE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	FOWLER, ALPHA A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	FRANCIS, HENRY L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	FRANCIS, HENRY L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	FRANK, BLANCH	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	FRANK, ELLEN	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	FYER, ABBY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	FYER, ABBY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	GELBER, RICHARD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	GELBER, RICHARD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	GENNINGS, CHRIS	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	GERALD, MICHAEL C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	GERALD, MICHAEL C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	GO, VAY LIANG W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	GOLDINER, PAUL L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	GOLDINER, PAUL L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	GRAMMER, LESLIE C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	GRIMES, PEARL E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	GRIMES, PEARL E	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUC	HASHIMOTO, KEN	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	HASHIMOTO, KEN	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	HENDERSON, CASSANDRA E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	HENDERSON, CASSANDRA E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	HORSBURGH, CHARLES R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	HORSBURGH, CHARLES R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	IHDE, DANIEL C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	INGLE, JAMES N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	INGLE, JAMES N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	JOHNSON, CAGE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	JOHNSON, CAGE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	JUDSON, FRANKLYN N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	JUDSON, FRANKLYN N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	JUHL, RANDY P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	JUHL, RANDY P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	KAISER, ALLEN B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	KAISER, ALLEN B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	KANE, JOHN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	KANE, JOHN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	KESSLER, ROBERT M	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUI	KESSLER, ROBERT M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	KIRSCHNER, BARBARA S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	KIRSCHNER, BARBARA S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	KOSASA, THOMAS S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	KOSASA, THOMAS S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	KREDICH, DEBORAH W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	KREDICH, DEBORAH W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	KREEK, MARY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	KREEK, MARY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	LAN, KUANG KUO G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	LAN, KUANG KUO G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	LASSER, ELLIOTT C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	LASSER, ELLIOTT C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	LAVIN, PHILIP T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	LAVIN, PHILIP T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	LEE, ELISA T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	LEE, ELISA T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUI	LIANG, MATTHEW H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	LIANG, MATTHEW H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	LUISADA, PAUL V	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUC	LUISADA, PAUL V	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	LUTHRA, HARVINDER S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	LUTHRA, HARVINDER S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MASSA, MARY C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MASSA, MARY C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MATHEWS, WILLIAM C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MCCLENNAN, BRUCE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MCCLENNAN, BRUCE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MEISCH, RICHARD A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MEISCH, RICHARD A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MELISH, MARIAN E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MELISH, MARIAN E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	MELTZER, ELI O	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MELTZER, ELI O	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MEYERSONN, MICHAEL	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MEYERSONN, MICHAEL	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MITCHELL, BERRI H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MODLIN, JOHN F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MODLIN, JOHN F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MOJER TORRES, LISA J	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUG	MUHIUDEEN, ISOBEL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MUHIUDEEN, ISOBEL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	MURPHY, SHIRLEY J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	NEW, MARIA I	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	NEW, MARIA I	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	O SULLIVAN, MARY JO	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	OCHS, JUDITH S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	OCHS, JUDITH S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	OMURA, GEORGE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	OWYANG, CHUNG	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PALMER, SUSAN K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PALMER, SUSAN K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PANUSH, RICHARD S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PANUSH, RICHARD S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PECK, GARNET E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PENN, RICHARD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PENN, RICHARD D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PETRI, MICHELLE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PETRI, MICHELLE A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PINGLETON, SUSAN K	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUG	PRITCHARD, KATHLEEN I	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PUJOLS MCKEE, ANA L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	PUJOLS MCKEE, ANA L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RAEHL, CYNTHIA L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RAMSEY, RUTH G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	REIDENBERG, MARCUS M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	REIDENBERG, MARCUS M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RELLER, LYMAN B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RELLER, LYMAN B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RHODES, CHRISTOPHE T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RHODES, CHRISTOPHE T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RICE, LORIE G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RICE, LORIE G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ROSENBERG, ELIAS W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RYAN, KENNETH J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	RYAN, KENNETH J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SACKETT, JOSEPH F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SACKETT, JOSEPH F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SAIDMAN, LAWRENCE J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SAIDMAN, LAWRENCE J	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRU	SALZMAN, CARL	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	SALZMAN, CARL	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	SCHIFFER, CHARLES A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	SCHIFFER, CHARLES A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	SCHNEIDER, MAX A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	SCHWARTZ, JOSEPH B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	SCHWARTZ, JOSEPH B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	SHARTS HOPKO, NANCY C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SHARTS HOPKO, NANCY C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SHEINER, LEWIS B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	SHEPHERD, ALEXANDER M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SHEPHERD, ALEXANDER M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SHIELDS, HELEN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SHOULSON, IRA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SHOULSON, IRA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	SIEGEL, MARILYN J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	SIEGEL, MARILYN J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	SIMON, LEE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRU	SIMON, LEE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	SIMPSON, PIPPA M	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUC	SIMPSON, PIPPA M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	SINAIKO, ALAN R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	SINAIKO, ALAN R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SIRIS, ETHEL S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SIRIS, ETHEL S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SIU, ALBERT L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SIU, ALBERT L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SLINGLUFF, BETH L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SMITH, MARK D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SMITH, MARK D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SNEAD, ORLANDO C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SNEAD, ORLANDO C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	STAVCHANSKY, SALOMON A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SWAIN, SANDRA M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SWARBRICK, JAMES	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	TAUSSIG, LYNN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	TAUSSIG, LYNN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	TAYLOR, ADDISON A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	HORPE, EDWIN M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ONG, THOEDORE G	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUG	ORRES, SARA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ORRES, SARA	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	SCHEN, EDUARDO H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	SCHEN, EDUARDO H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	VALENTINE, FRED T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	VALENTINE, FRED T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	VAN DEVENTER, GARY M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WALLACH, EDWARD E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WALLACH, EDWARD E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	WEDEL, DENISE J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	WEDEL, DENISE J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	WENZEL, SALLY E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WENZEL, SALLY E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WHITEHOUSE, PETER J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WHITEHOUSE, PETER J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WOOD, ALASTAIR J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WOOD, ALASTAIR J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WOOD, MARGARET	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	WOOD, MARGARET	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	YANG, GRACE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CDRUG	YOUNG, ALICE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	YOUNG, ALICE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	YOUNG, MARIE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	YOUNG, MARIE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	YUSUF, SALIM	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUG	ZAWADZKI, JOANNA K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	ZONES, JANE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CDRUC	ZONES, JANE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	GLINSMANN, WALTER H	ED	EXPERT (5 USC 3109)
CFSAN	BEACHY, ROGER N	EF	CONSULTANT (5 USC 3109)
CFSAN	DE ZOETEN, GUSTAAF A	EF	CONSULTANT (5 USC 3109)
CFSAN	FEDOROFF, NINA V	EF	CONSULTANT (5 USC 3109)
CFSAN	GILMORE, MICHAEL S	EF	CONSULTANT (5 USC 3109)
CFSAN	HSIEH, DENNIS P	EF	CONSULTANT (5 USC 3109)
CFSAN	JACOBY, GEORGE A	EF	CONSULTANT (5 USC 3109)
CFSAN	SAMPSON, HUGH A	EF	CONSULTANT (5 USC 3109)
CFSAN	STOTZKY, GUENTHER	EF	CONSULTANT (5 USC 3109)
CFSAN	ASKEW, ELTON W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	BENEDICT, STEPHEN H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	BLACKBURN, HENRY	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	BLAKE, PAUL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	BRANDT, EDWARD N	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	BROWN, MYRTLE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)

CFSAN	CLANCY, KATHERINE L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	CLYDESDALE, FERGUS M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	COLWELL, RITA R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	CRAWFORD JR, LESTER M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	CRAYTON, EVELYN F	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	GOLDBERG, JEANNE P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	GUSSOW, JOAN D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	HARLANDER, SUSAN K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	LEVEILLE, GILBERT A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	LINEBACK, DAVID R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	MASCOLA, LAURENE	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	NESTLE, MARION	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	ROBERTS, MARTHA R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	RODIER, PATRICIA M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	STEINGARTEN, JEFFREY L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	WANG, MARY S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	WHITE, DONALD L	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CFSAN	ZILLER JR, STEPHEN A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	KORITZ, GARY D	ED	EXPERT (5 USC 3109)
CVM	AARON, DEBRA K	EF	CONSULTANT (5 USC 3109)
CVM	AMMERMAN, CLARENCE B	EF	CONSULTANT (5 USC 3109)
CVM	CURRAN, BERNARD J	EF	CONSULTANT (5 USC 3109)

CVM	D ARGENIO, DAVID Z	EF	CONSULTANT (5 USC 3109)
CVM	DONOGHUE, SUSAN	EF	CONSULTANT (5 USC 3109)
CVM	DURAN, BETTYE S	EF	CONSULTANT (5 USC 3109)
CVM	FITZPATRICK, SUZANNE C	EF	CONSULTANT (5 USC 3109)
CVM	GERKEN, DIANE K	EF	CONSULTANT (5 USC 3109)
CVM	JUSKEVICH, JUDITH E	EF	CONSULTANT (5 USC 3109)
CVM	O BRIEN, THOMAS F	EF	CONSULTANT (5 USC 3109)
CVM	PURCHASE, HARVEY G	EF	CONSULTANT (5 USC 3109)
CVM	REIMANN, HANS P	EF	CONSULTANT (5 USC 3109)
CVM	RIVIERE, JIM E	EF	CONSULTANT (5 USC 3109)
CVM	WALKER, ROBERT D	EF	CONSULTANT (5 USC 3109)
CVM	WOLF, ALICE M	EF	CONSULTANT (5 USC 3109)
CVM	AARON, DEBRA K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	AMMERMAN, CLARENCE B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	CURRAN, BERNARD J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	DURAN, BETTYE S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	GERKEN, DIANE K	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	KLEVEN, STANLEY H	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	KORITZ, GARY D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	PURCHASE, HARVEY G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
CVM	WOLF, ALICE M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	ANDERS, MARION W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	BENDITT, EARL P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	CAMP, TURNER	EI	ADVISORY COMMITTEE MEMBER (OTHER)

NCTR	CRUMP, KENNY S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	DAVIS, HAROLD	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	DUBICK, MICHAEL A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	FAVATA, ELISSA A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	HARRISON, ROBERT W	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	KURLAND, LEONARD T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	LITTLEFIELD, LYNDIA G	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	O FLAHERTY, ELLEN J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	OBRIEN, PETER C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	SETLOW, RICHARD B	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	SMITH SONNEBORN, JOAN	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	SPENCER, PETER S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	STOLLEY, PAUL D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	WOGAN, GERALD M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
NCTR	YOUNG, LILY Y	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	BLOUT, ELKAN R	ED	EXPERT (5 USC 3109)
OC	GREIF, MARGARET G	ED	EXPERT (5 USC 3109)
OC	SCHNEIDER, LON S	ED	EXPERT (5 USC 3109)
OC	SCHNEIDER, LON S	ED	EXPERT (5 USC 3109)
OC	SHEPPARD, AUDREY D	ED	EXPERT (5 USC 3109)
OC	YAMAMOTO, CORA E	ED	EXPERT (5 USC 3109)
OC	BUTLER, JOAN T	EF	CONSULTANT (5 USC 3109)
OC	COSTER, JOHN M	EF	CONSULTANT (5 USC 3109)

OC	AGOSTO, MOISES	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	AMMANN, ARTHUR J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	BENET, LESLIE Z	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	BOWIE, WALTER C	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	CHENG, BENJAMIN	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	COTTON, DEBORAH J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	FULLILOVE, MINDY T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	HEARN, RUBY P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	HO, DAVID D	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	ISSELBACHER, KURT J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	KIPNIS, DAVID M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	MCGOVERN, THERESA M	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	NEEDLEMAN, PHILIP	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	NELSON, CHARLES A	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	ROSENBERG, LEON E	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	RUTTER, WILLIAM J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	SCHOOLEY, ROBERT T	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	STALEY, PETER R	EI	ADVISORY COMMITTEE MEMBER (OTHER)
OC	WONG STAAL, FLOSSIE	EI	ADVISORY COMMITTEE MEMBER (OTHER)
ORA	OTTES, RONALD T	ED	EXPERT (5 USC 3109)
ORA	ARONOW, SAUL	EF	CONSULTANT (5 USC 3109)

ORA	BELL, JOHN E	EF	CONSULTANT (5 USC 3109)
ORA	BERNSTEIN, RICHARD L	EF	CONSULTANT (5 USC 3109)
ORA	BIEHL, EDWARD R	EF	CONSULTANT (5 USC 3109)
ORA	CALLERY, PATRICK S	EF	CONSULTANT (5 USC 3109)
ORA	CARUSO, JOSEPH A	EF	CONSULTANT (5 USC 3109)
ORA	DER HARDEROSIAN, ARA H	EF	CONSULTANT (5 USC 3109)
ORA	EITENMILLER, RONALD R	EF	CONSULTANT (5 USC 3109)
ORA	FEIGHAN, JOSEPH A	EF	CONSULTANT (5 USC 3109)
ORA	GREENWOOD, JAMES R	EF	CONSULTANT (5 USC 3109)
ORA	HAMDY, MOSTAFA K	EF	CONSULTANT (5 USC 3109)
ORA	HENDERSON, DONALD L	EF	CONSULTANT (5 USC 3109)
ORA	HIRSHFIELD, IRVIN M	EF	CONSULTANT (5 USC 3109)
ORA	HOWELL, JAMES A	EF	CONSULTANT (5 USC 3109)
ORA	HURLBUT, JEFFREY A	EF	CONSULTANT (5 USC 3109)
ORA	JAHNGEN JR, EDWIN G	EF	CONSULTANT (5 USC 3109)
ORA	JOHNSON, DEBORAH L	EF	CONSULTANT (5 USC 3109)
ORA	LADIN, ZVI	EF	CONSULTANT (5 USC 3109)
ORA	MARGOLIN, AARON B	EF	CONSULTANT (5 USC 3109)
ORA	MELOAN, CLIFTON E	EF	CONSULTANT (5 USC 3109)
ORA	OMIECINSKI, CURTIS J	EF	CONSULTANT (5 USC 3109)
ORA	PEREZ, JOHN C	EF	CONSULTANT (5 USC 3109)
ORA	POOLE, COLIN F	EF	CONSULTANT (5 USC 3109)
ORA	ROTHMAN, BARRY S	EF	CONSULTANT (5 USC 3109)
ORA	RUENITZ, PETER C	EF	CONSULTANT (5 USC 3109)
ORA	SCHABER, PETER M	EF	CONSULTANT (5 USC 3109)
ORA	SOFOS, JOHN N	EF	CONSULTANT (5 USC 3109)
ORA	SOPER, STEVEN A	EF	CONSULTANT (5 USC 3109)
ORA	SPECCHIO, JOHN J	EF	CONSULTANT (5 USC 3109)

ORA	TATINI, SITA R	EF	CONSULTANT (S USC 3109)
ORA	TRAGER, WILLIAM F	EF	CONSULTANT (S USC 3109)
ORA	VASSOS, BASIL H	EF	CONSULTANT (S USC 3109)
ORA	WEST, C DAVID	EF	CONSULTANT (S USC 3109)
ORA	WESTHOFF, DENNIS C	EF	CONSULTANT (S USC 3109)
ORA	ZAPISEK, WILLIAM F	EF	CONSULTANT (S USC 3109)
ORA	ZITO, SANTO W	EF	CONSULTANT (S USC 3109)
ORA	CHAO, STEPHEN S	EI	ADVISORY COMMITTEE MEMBER (OTHER)
ORA	GENZANO, RALPH	EI	ADVISORY COMMITTEE MEMBER (OTHER)
ORA	O BRIEN, MARY	EI	ADVISORY COMMITTEE MEMBER (OTHER)
ORA	SCHWARTZ, ELEANOR P	EI	ADVISORY COMMITTEE MEMBER (OTHER)
ORA	SPILLANE, MICHAEL J	EI	ADVISORY COMMITTEE MEMBER (OTHER)
ORA	STRADER, PAUL K	EI	ADVISORY COMMITTEE MEMBER (OTHER)

TOTAL RECORDS PRINTED: 1516

Question: What is the rationale in terms of Agency efficiency for using each of the personnel listed above?

Answer: FDA is a scientific, technical organization. The work we undertake requires extensive knowledge and technical expertise as we deal with a rapidly changing environment. The expertise of these people helps FDA deal with the many issues, concerns, and problems of protecting the public health.

Question: Discuss any alternatives to using such consultants or detailees in each Program and Project area and the budgetary impact of these alternative.

Answer: In general, we are exploring different alternatives to using consultants/detailees for accomplishing the Agency's mission. Some examples include user fee legislation, use of third parties, and exemptions of certain activities. These efforts actually occur in our daily activities ranging from program assessments, budget formulation, the planning process, and our continuous dialogue with industry. Because these

efforts cross-cut all of FDA's daily activities, it is extremely difficult to extract specifically which activities are for which end products.

ADVISORY COMMITTEES

Question: For each of the Food and Drug Administration's Advisory Committees, please provide the following information: for each fiscal year from 1992 through 1996, a budget detailing the Advisory Committee's actual, estimated or projected outlays and a breakdown of such outlays by issue area; and describe how the functions of each Advisory Committee are integrated into the operation of the Agency and comment on the efficiency that the Advisory Committees add to Agency operations.

Answer: The Food and Drug Administration's advisory committees make an essential contribution to health and safety through their highly visible support of the Agency in its mission of ensuring that the public receives safe and effective medical and food products. In addition to providing scientific and technical advice from the preeminent experts in their fields, FDA's advisory committees lend scientific consensus and credibility to the Agency's often controversial product review process. Committee meetings are held in open forum, a forum which allows the public to attend and participate in the process by which FDA makes decisions on new products. The value of public decisionmaking and scientific consensus is such that the use of public advisory committees often speeds the review of new and controversial products.

In a study of FDA's advisory committees completed and published in 1992, the Institute of Medicine (IOM) of the National Academy of Sciences/National Research Council (NAS/NRC) determined that the scope of FDA's regulatory responsibilities is "so vast and its involvement in leading-edge scientific and technical matters so deep that the agency cannot maintain contact with the frontiers of science and medicine" without the expert advice provided by its advisory committees.

Advisory committee information follows:

The following is a breakdown of the actual and/or projected costs for each of FDA's advisory committees during fiscal years 1992 through 1996:

Committee Name	FY 92		FY 93		FY 94		FY 95		FY 96	
	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual	Projected
Advisory Committee on Special Studies Relating to the Possible Long-Term Health Effects of Phenoxyl Herbicides and Contaminants	26,272		48,110		13,661		20,567		21,595	
Allergenic Products Advisory Committee	44,912		64,809		0		150,552		160,899	
Anesthetic and Life Support Drugs Advisory Committee	77,675		87,264		85,645		84,768		89,278	
Anti-Infective Drugs Advisory Committee	71,776		126,221		79,672		75,236		97,318	
Antiviral Drugs Advisory Committee	89,009		104,293		90,388		106,939		114,212	
Arthritis Advisory Committee	79,742		65,420		35,282		81,835		85,828	
Biological Response Modifiers Advisory Committee	94,226		71,187		94,570		216,387		228,100	
Blood Products Advisory Committee	225,347		245,045		251,728		248,719		261,114	
Board of Tea Experts	8,568		8,999		6,974*		7,198*		7,310*	
Cardiovascular and Renal Drugs Advisory Committee	76,433		143,415		83,808		100,139		102,240	

* This is projected prorated salary Federal staff costs only. No funds are allocated for the Board.

FY 92 FY 93 FY 94 FY 95 FY 96

Committee Name	Actual	Actual	Actual	Projected	Projected
Dermatologic and Ophthalmic Drugs Advisory Committee	57,134	63,056	60,805	45,205	52,970
Device Good Manufacturing Practice Advisory Committee	0	0	0	25,570	26,043
Drug Abuse Advisory Committee	84,678	96,522	74,600	74,525	77,580
Endocrinologic and Metabolic Drugs Advisory Committee	95,425	40,693	38,711	127,890	132,602
Fertility and Maternal Health Drugs Advisory Committee	67,321	53,433	81,271	72,222	73,571
Food Advisory Committee	0	244,011	249,336	366,300	363,800
Gastrointestinal Drugs Advisory Committee	67,103	93,333	76,022	71,141	72,082
Generic Drugs Advisory Committee	52,239	113,977	82,364	154,131	157,720
Medical Devices Advisory Committee	649,844	595,843	1,009,983	1,224,861	1,286,777
Medical Imaging Drugs Advisory Committee	55,460	55,986	0	73,009	89,798
National Mammography Quality Assurance Advisory Committee	0	0	366,929	267,438	314,059
National Task Force on Acquired Immunodeficiency Syndrome (AIDS) Drug Development	0	0	265,541	349,070	120,000

FY 92 FY 93 FY 94 FY 95 FY 96

Committee Name	Actual	Actual	Actual	Projected	Projected
Nonprescription Drugs Advisory Committee	0	87,951	113,522	130,404	133,393
Oncologic Drugs Advisory Committee	82,110	96,349	74,219	160,482	174,102
Peripheral and Central Nervous System Drugs Advisory Committee	83,801	113,020	80,233	132,525	135,645
Psychopharmacologic Drugs Advisory Committee	55,494	82,294	57,062	72,222	107,712
Pulmonary-Allergy Drugs Advisory Committee	70,814	59,375	37,719	72,318	76,229
Science Advisory Board to the National Center for Toxicological Research	32,024	52,475	47,909	49,119	51,574
Science Board to the Food and Drug Administration	0	99,661	96,867	168,183	184,011
Technical Electronic Product Radiation Safety Standards Committee	0	0	0	0	0
Vaccines and Related Biological Products Advisory Committee	141,253	112,561	199,337	231,469	236,112
Veterinary Medicine Advisory Committee	67,743	44,745	62,012	65,308	67,920

USER FEES

Question: For fiscal years 1992 through 1996, please provide detailed information on actual, estimated or projected user fee collections, and all actual, estimated or projected outlays from user fee-raised funds. Provide this information separately for each class of user fee.

Answer: I will be happy to provide this information for the record.

[The information follows:]

USER FEE COLLECTIONS AND OUTLAYS

Detailed information on actual, estimated, and projected user fee collections and outlays for each user fee follows (FY 1992 is not included because user fees were not then authorized):

<u>Collections</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
\$millions					
PDUFA Revenues					
Fees collected during FY 1993		28.5			
Fees collected during FY 1994		5.7	48.0		
Total fees collected		34.2	48.0		
Accounts receivable 9/30/94		.5	.3		
Total		34.7	48.3	79.4	84.7

Note: \$79.4 million reflects FY 1995 appropriated level.
\$84.7 million reflects amount in FY 1996 budget request.

<u>Collections</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
\$millions					
MQSA	NA	NA	NA	6.5	13.0
MDUFA	NA	NA	NA	NA	23.7
Imports	NA	NA	NA	NA	15.0
Cert. fund/FOIA	3.7	3.4	4.8	5.0	5.2

<u>Outlays</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
\$ Millions					
PDUFA	NA	-19.6	-13.8	19.5	30.1
MQSA	NA	NA	NA	6.5	13.0
MDUFA	NA	NA	NA	NA	23.7
Imports	NA	NA	NA	NA	15.0
Cert. fund/FOIA	4.1	4.0	4.3	5.3	5.5

Question. For each class of user fee, describe any assumptions underlying the agency's 1996 projected budget for user fees. Please evaluate the budgetary risks involved with each of the above assumptions.

Answer. I will be happy to provide the details for the record.

[The information follows:]

USER FEES

In 1996, FDA plans on utilizing four separately authorized user fees, excluding the certification fund. Certain assumptions underlie these projected fees, and as a result there is some budgetary risk associated with each as noted below:

PDUFA -- Three conditions must be met before PDUFA fees can be collected:

1) Assessment of fees. Fees may not be assessed for a fiscal year beginning after fiscal year 1993 unless appropriations for salaries and expenses of the FDA for such fiscal year are equal to or greater than the amount of appropriations for the salaries and expenses of FDA for fiscal year 1992 multiplied by the adjustment factor applicable to the fiscal year involved.

The adjustment factor is the lower of either:

CPI-U (all items, US city average) for August of FY 19XX divided by the August 92 index; or total discretionary budget authority provided for programs in the domestic category for FY 19XX divided by the total discretionary budget authority for domestic programs in the preceding fiscal year.

The 1996 budget request meets the PDUFA trigger.

2) Revenue. The total amount of fees charged, as adjusted for a fiscal year, may not exceed the total costs for such fiscal year for the resources allocated for the process for the review of human drug applications.

3) Crediting and availability of fees. The fees authorized by PDUFA:

a) must be collected in each fiscal year in an amount equal to the amount specified in appropriation acts for such fiscal year; and

b) can only be collected and available to defray increases in the costs of the resources allocated for the process for the review of human drug applications (including increases in such costs for an additional number of full-time equivalent positions in the Department of Health and Human Services to be engaged in such process) over such costs for fiscal year 1992 multiplied by the adjustment factor.

MQSA -- Not applicable

MDUFA -- Requires enabling legislation

Imports -- Requires enabling legislation

Question. For fiscal years 1992 through 1996, please detail the actual, estimated or projected outlays and personnel involved in efforts to obtain expanded user fee authority.

Answer. FDA does not have specific personnel assigned to obtain expanded user fee authority.

DRUG, BIOLOGICS AND MEDICAL DEVICE APPROVAL PROCESS

Question: For each fiscal year from 1990 to 1994 (and as available for fiscal year 1995 and projected for fiscal year 1996), please provide the following information for New Drug Applications ("NDAs"), New Molecular Entities ("NMEs"), NDA Supplements, Abbreviated New Drug Applications ("ANDAs"), Medical Device Premarket Approval Applications ("PMAs"), PMA Supplements, Medical Device Premarket Notifications ("510(k)s"), and Product License Applications ("PLAs"): the ratio of number of applications approved in each class of application to total actual or estimated outlays dedicated to that class of application; the ratio of the number of primary reviewers assigned to work on product approvals in each class of application to the number of applications approved for that class of application; the ratio of the number of FTEs assigned to work on product approvals in each class of application to the number of applications approved for that class of application; and the ratio of the number of primary reviewers assigned to work on product approvals in each class of application to total actual or estimated outlays dedicated to that class of application.

Answer. The information requested on drug, biologics, and medical device approvals follows:

PRIORITY NDAs APPROVED FROM OCTOBER 1, 1988 TO FEBRUARY 28, 1995

NDA#	DRUG NAME	IND RECEIPT DATE *	NDA RECEIPT DATE **	NDA APPROVAL DATE
18554	EULEXIN	11-AUG-71	30-SEP-80	27-JAN-89
18869	NIMOTOP	29-JUN-79	17-SEP-82	28-DEC-88
19002	VASCOR	18-FEB-82	28-DEC-83	29-DEC-90
19058	TENORMIN	NO IND ***	24-JUN-83	13-SEP-89
19188	GASTROCRON	24-JUL-75	29-DEC-83	22-DEC-89
19268	CYTOTEC	14-SEP-78	19-APR-84	27-DEC-88
19334	ELDEPRYL	14-NOV-85	23-JUL-84	05-JUN-89
19387	ETHAMOLIN	16-AUG-82	14-SEP-84	22-DEC-88
19385	PERMAX	03-JUL-78	13-SEP-85	30-DEC-88
19481	RENACIDIN	09-JAN-75	20-FEB-86	02-OCT-90
19579	MEFLOQUINE HYDROCHLORIDE	27-JUN-72	05-FEB-86	02-MAY-89
19649	FLUMADINE	18-JUL-77	14-NOV-86	17-SEP-93
19650	FLUMADINE	24-JAN-86	14-NOV-86	17-SEP-93
19681	ASACOL	26-MAR-85	12-SEP-86	31-JAN-92
19681	CYTOVENE	11-OCT-84	29-DEC-86	23-JUN-89
19687	SANDOSTATIN	16-MAR-84	09-FEB-87	21-OCT-88
19698	TORADOL	28-FEB-83	22-JUN-87	30-NOV-89
19715	DIPENTUM	08-OCT-82	01-SEP-87	31-JUL-90
19732	LUPRON	31-OCT-85	25-JUN-87	26-JAN-89
19737	METROGEL	06-MAR-85	30-OCT-87	22-NOV-88
19753	ETHMOZINE	07-APR-76	01-SEP-87	19-JUN-90
19758	CLOZARIL	20-OCT-71	01-SEP-87	26-SEP-89
19763	IFEX	23-JUL-74	10-DEC-87	30-DEC-88
19795	CONDYLOX	29-JAN-86	21-DEC-87	13-DEC-90
19810	PRIOLOSEC	23-DEC-83	01-JUL-88	14-SEP-89
19817	PERSANTINE	10-MAY-78	04-JAN-88	13-DEC-90
19818	ADAGEN	03-SEP-85	13-JAN-88	21-MAR-90
19820	CERTEC	17-JUL-86	15-MAR-88	30-DEC-88
19836	SUPPRELIN	28-MAR-77	22-MAY-89	24-DEC-91
19849	REV-EYES	17-OCT-85	27-MAY-89	31-DEC-90
19865	BETAPACE	29-MAR-85	30-JUN-88	30-OCT-92
19879	CRNIDYL	09-FEB-82	02-AUG-88	28-NOV-90
19880	PARAPLATIN	01-OCT-84	30-JUN-88	03-MAR-89
19884	MESNEX	30-NOV-84	06-JUL-88	30-DEC-88
19887	NEBUPENT	02-SEP-87	12-SEP-88	15-JUN-89
19887	NORPLANT	08-NOV-74	26-AUG-88	10-DEC-90
19906	ANAFRANIL	24-NOV-69	16-JUN-89	29-DEC-89
19910	RETROVIR	NO IND ***	28-OCT-88	28-SEP-89
19926	HEXALEN	05-JUN-63	19-DEC-88	26-DEC-90
19929	CARDIOTEC	19-JUL-85	23-DEC-88	19-DEC-90

NDA#	DRUG NAME	IND RECEIPT DATE *	NDA RECEIPT DATE **	NDA APPROVAL DATE
19937	ADENOCARD	09-OCT-85	28-DEC-88	30-OCT-89
19949	DIFLUCAN	28-SEP-84	02-MAR-89	29-JAN-90
19951	RETROVIR	NO IND ***	01-FEB-89	02-FEB-90
19951	GANITE	11-OCT-73	20-MAR-89	17-JAN-91
19976	PHOSLO	12-MAY-87	09-MAY-89	10-DEC-90
19979	TICLID	22-SEP-76	15-NOV-89	31-OCT-91
19998	CHEMET	03-OCT-80	22-AUG-89	30-JAN-91
20007	ZOFRAN	20-AUG-86	12-OCT-89	04-JAN-91
20035	ERGAMISOL	25-FEB-77	01-NOV-89	18-JUN-90
20036	AREDIA	01-JUN-87	21-DEC-89	31-OCT-91
20037	VOLTAREN	20-DEC-94	19-DEC-89	28-MAR-91
20038	FLUDARA	29-NOV-82	24-NOV-89	18-APR-91
20044	EXOSURF NECNATAL	01-MAY-85	16-FEB-90	02-AUG-90
20049	PENTASA	10-FEB-86	30-NOV-90	10-MAY-93
20057	CEREDASE	18-JUL-79	24-APR-90	05-APR-91
20068	FOSCAVIR	23-DEC-86	20-SEP-90	27-SEP-91
20070	COGNEX	07-MAY-87	04-JUN-90	09-SEP-93
20073	ROMAZICON	19-NOV-84	10-DEC-90	20-DEC-91
20075	LIQRESAL	25-SEP-87	25-APR-90	17-JUN-92
20080	IMITREX	27-FEB-87	02-JUL-90	28-DEC-92
20083	SPORANOX	07-JUN-84	31-MAY-90	11-SEP-92
20094	IOBENGUANE SULFATE I 131	22-FEB-90	15-NOV-91	25-MAR-94
20088	NORPLANT SYSTEM KIT	NO IND ***	14-JUN-90	10-DEC-90
20091	IMAGENT	09-JAN-73	25-OCT-90	13-AUG-93
20098	MIVACRON	07-JUN-84	30-AUG-90	22-JAN-92
20101	PROZAC	09-SEP-87	11-JUL-90	24-APR-91
20103	ZOFRAN	19-OCT-87	24-AUG-90	31-DEC-92
20105	TRIOSTAT	29-MAY-83	14-AUG-90	31-DEC-91
20119	VUMON	12-JUL-68	28-SEP-90	14-JUL-92
20122	NIPENT	19-JUN-79	11-FEB-91	11-OCT-91
20134	METASTRON	30-AUG-84	02-OCT-92	18-JUN-93
20154	VIDEX	28-JUL-88	02-APR-91	09-OCT-91
20155	VIDEX 375MG/PACKET	28-JUL-88	02-APR-91	09-OCT-91
20156	VIDEX 10MG/ML	28-JUL-88	02-APR-91	09-OCT-91
20164	LOVENOX	19-APR-88	31-DEC-91	29-MAR-93
20176	KABIVITE PED F+W	NO IND ***	10-JUN-91	29-DEC-93
20180	PROSCAR	23-MAY-96	15-APR-91	19-JUN-92
20182	CARNITOR	28-NOV-79	29-APR-91	16-DEC-92
20189	FELBATOL	30-JUN-82	30-SEP-91	29-JUL-93
20195	FENTANYL	12-NOV-85	27-MAY-93	04-OCT-93

NDA#	DRUG NAME	IND RECEIPT DATE *	NDA RECEIPT DATE **	NDA APPROVAL DATE
20199	HIVID	08-APR-87	31-OCT-91	19-JUN-92
20207	ALKERAN	08-APR-88	31-JUL-91	18-NOV-92
20219	LIVOSTIN	05-MAR-86	24-SEP-91	10-NOV-93
20222	COLESTID	05-SEP-90	29-JUN-92	19-JUL-94
20228	ATROVENT	15-DEC-77	11-OCT-91	29-SEP-93
20229	LEUSTATIN	20-OCT-86	31-DEC-91	26-FEB-93
20235	NEURONTIN	02-JUN-86	31-JAN-92	30-DEC-93
20236	SEREVENT	02-DEC-87	20-DEC-91	04-FEB-94
20237	SALAGEN	17-FEB-89	22-JUL-92	22-MAR-94
20241	LAMICTAL	14-MAR-84	23-MAR-92	27-DEC-94
20246	DEPO-PROVERA	22-JUL-63	30-APR-92	29-OCT-92
20250	HALFAN	19-MAR-86	07-JAN-92	24-JUL-92
20258	IOPIDINE	20-SEP-89	15-JUN-92	30-JUL-93
20259	MEFRON	12-JUL-89	24-APR-92	25-NOV-92
20262	TAXOL	29-SEP-83	22-JUL-92	29-DEC-92
20272	RISPERDAL	09-AUG-89	15-APR-92	29-DEC-93
20304	TRASYLOL	09-MAY-89	24-NOV-92	29-DEC-93
20306	FLUDEOXYGLUCOSE F-19	NO IND ***	19-JAN-93	19-AUG-94
20314	DOCTREDOLAN	NO IND ***	23-OCT-92	02-JUN-94
20315	ORLAAM	12-FEB-91	21-JUN-93	09-JUL-93
20357	GLUCOPHAGE	26-FEB-86	29-SEP-93	29-DEC-94
20367	CEREZYME	22-OCT-91	21-MAY-93	23-MAY-94
20388	NAVELBINE	19-JUN-90	27-AUG-93	23-DEC-94
20392	CYSTAGON	17-FEB-93	23-NOV-93	15-AUG-94
20409	TRUSOPT	09-FEB-89	10-DEC-93	09-DEC-94
20412	ZERIT	16-DEC-98	28-DEC-93	24-JUN-94
20460	CYTOSVENE	11-OCT-94	29-JUN-94	22-DEC-94
20474	VEXOL	19-JAN-90	01-JUN-94	20-DEC-94
20500	MEFRON	22-OCT-92	15-AUG-94	08-FEB-95
50625	SANDIMMUNE	NO IND ***	28-NOV-95	02-MAR-90
50661	IDAMYCIN	19-FEB-81	31-AUG-89	27-SEP-90
50662	BIAXIN	07-AUG-85	20-DEC-89	31-OCT-91
50670	ZITHROMAX	28-SEP-84	11-APR-90	01-NOV-91
50689	MYCOBUTIN	15-JAN-87	17-JAN-92	23-DEC-92
50708	PROGRAF	02-APR-90	26-JUL-93	08-APR-94
50709	PROGRAF INJECTABLE	02-APR-90	04-AUG-93	08-APR-94

* When there are multiple INDs and no single IND contains the studies that clearly support the NDA, the first IND received by the agency that is related to the drug is used as the supporting IND.

** NDA RECEIPT DATE - the receipt date of the fileable application. In the case of a refuse to file or withdraw before filing, this date would be the resubmission date. If unacceptable for filing, the receipt date is the day the full amount for the User Fee application was paid.

*** NO IND - when another NDA, a DMF (drug master file), or foreign studies contain the clinical studies supporting NDA approval, no supporting IND is listed in the table.

NMEs APPROVED FROM OCTOBER 1, 1988 TO FEBRUARY 28, 1995

NME#	DRUG NAME	IND RECEIPT DATE *	NDA RECEIPT DATE **	NDA APPROVAL DATE
18554	EULEXIN	11-AUG-71	30-SEP-80	27-JAN-89
18841	DAYPRO	29-JUN-71	17-AUG-82	29-OCT-92
18869	NIMOTOP	29-JUN-79	17-SEP-82	28-DEC-88
18922	LODINE	20-DEC-79	30-DEC-82	31-JAN-91
19002	VASCOR	18-FEB-82	28-DEC-83	28-DEC-90
19080	PROSOM	27-MAY-76	19-DEC-83	26-DEC-90
19082	DALGAN	16-MAY-73	29-JUL-83	29-DEC-89
19091	ISMO	13-JAN-84	30-DEC-83	30-DEC-91
19151	RYTHMOL	06-FEB-80	26-OCT-83	27-NOV-89
19204	CARTROL	08-SEP-76	03-OCT-84	28-DEC-88
19268	CYTOTEC	14-SEP-78	19-APR-84	27-DEC-88
19304	LIPIDIL	07-AUG-81	04-JUN-84	31-DEC-93
19334	ELDEPRYL	14-NOV-85	23-JUL-84	05-JUN-89
19357	ETHAMOLIN	16-AUG-82	14-SEP-84	22-DEC-88
19385	PERMAX	03-JUL-78	24-APR-85	30-DEC-88
19402	HISMANAL	22-APR-80	25-FEB-85	29-DEC-88
19414	CARDIOGEN-82	24-JUN-82	28-DEC-84	29-DEC-89
19456	PINDAC	08-JUL-82	31-JUL-85	28-DEC-89
19488	CARDENE	07-MAY-81	20-NOV-85	21-DEC-88
19546	DYNACIRC	30-JUL-82	25-APR-86	20-DEC-90
19578	MEFLOQUINE HYDROCHLORIDE	27-JUN-72	05-FEB-86	02-MAY-89
19580	OSMOVIST	03-JAN-83	10-FEB-86	07-DEC-89
19583	RELAFEN	05-MAY-80	10-FEB-86	24-DEC-91
19616	PENETREX	27-SEP-82	24-OCT-86	31-DEC-91
19627	DIPRIVAN	28-OCT-83	01-AUG-86	02-OCT-89
19638	ARDUAN	31-JUL-85	29-DEC-87	26-JUN-90
19649	FLUMADINE	18-JUL-77	14-NOV-86	17-SEP-93
19653	ORTHO CYCLEN	19-MAR-75	24-MAR-87	29-DEC-89
19658	CLARITIN	07-DEC-82	31-OCT-86	12-APR-93
19660	TILADE	04-FEB-83	03-MAR-87	30-DEC-92
19661	CYTOVENE	11-OCT-84	29-DEC-86	23-JUN-89
19667	SANDOSTATIN	15-MAR-84	09-FEB-87	21-OCT-88
19668	CARDURA	23-DEC-82	11-MAR-87	02-NOV-90
19693	DECABID	16-DEC-80	05-JAN-88	29-DEC-89
19698	TORADOL	25-FEB-83	22-JUN-87	30-NOV-89
19710	OPTIRAY	23-DEC-85	26-JUN-87	30-DEC-88
19715	DIPENTUM	05-OCT-82	01-SEP-87	31-JUL-90
19726	ZOLADEX	04-MAY-84	14-AUG-87	29-DEC-89
19735	FLOXIN	28-OCT-82	22-DEC-87	28-DEC-90
19753	ETHMOZINE	07-APR-76	01-SEP-87	19-JUN-90

INDEX	DRUG NAME	IND RECEIPT DATE *	NDA RECEIPT DATE **	NDA APPROVAL DATE
19758	CLOZARIL	20-OCT-71	01-SEP-87	26-SEP-89
19763	IFEX	23-JUL-74	10-DEC-87	30-DEC-88
19766	ZOCOR	28-JAN-85	16-OCT-87	23-DEC-91
19785	CARDIOLITE	08-MAY-86	17-MAR-88	21-DEC-90
19787	NORVASC	08-JUN-83	23-DEC-87	31-JUL-92
19806	SEMPREX-D	07-AUG-84	29-DEC-87	25-MAR-94
19810	PRILOSEC	23-DEC-83	21-DEC-87	14-SEP-89
19818	ADAGEN	03-SEP-85	13-JAN-88	21-MAR-90
19828	OXISTAT	05-DEC-85	11-FEB-88	30-DEC-88
19829	CERETEC	17-JUL-86	15-MAR-88	30-DEC-88
19834	PLENDIL	28-AUG-84	26-FEB-88	25-JUL-91
19836	SUPPRELIN	28-MAR-77	02-SEP-88	24-DEC-91
19839	ZOLOFT	07-OCT-80	13-APR-88	30-DEC-91
19849	REV-EYES	17-OCT-85	27-MAY-88	31-DEC-90
19851	LOTENSIN	08-SEP-83	06-JUL-88	25-JUN-91
19863	GEREF	10-JUL-87	05-MAY-88	28-DEC-90
19865	BETAPACE	29-MAR-65	30-JUN-88	30-OCT-92
19879	ORNIDYL	09-FEB-82	02-AUG-88	28-NOV-90
19880	PARAPLATIN	01-OCT-84	30-JUN-88	03-MAR-89
19882	TECHNISCAN MAG3	19-FEB-86	18-OCT-88	15-JUN-90
19884	MESNEX	30-NOV-84	06-JUL-88	30-DEC-88
19885	ACCUPRIL	19-MAY-82	26-JAN-89	19-NOV-91
19886	SYNAREL	12-NOV-80	16-NOV-88	13-FEB-90
19898	PRAVACHOL	03-OCT-85	07-SEP-88	31-OCT-91
19901	ALTACE	06-JAN-84	07-NOV-88	28-JAN-91
19906	ANAFRANIL	24-NOV-69	16-JUN-89	29-DEC-89
19907	METIPRANOLOL HYDROCHLORIDE	30-DEC-83	21-OCT-88	29-DEC-89
19908	AMBIEN	16-NOV-84	30-JAN-89	16-DEC-92
19915	MONOPRIL	16-NOV-83	15-NOV-88	16-MAY-91
19926	HEXALEN	05-JUN-63	19-DEC-88	26-DEC-90
19928	CARDIOTEC	19-JUL-85	23-DEC-88	19-DEC-90
19937	ADENOCARD	09-OCT-85	28-DEC-88	30-OCT-89
19940	ACTINEX	22-SEP-82	10-APR-89	04-SEP-92
19946	NUROMAX	28-MAR-85	21-MAR-89	07-MAR-91
19949	DIFLUCAN	28-SEP-84	02-MAR-89	29-JAN-90
19957	CUTIVATE	07-JUL-86	26-OCT-89	14-DEC-90
19960	MANOPLAX	30-NOV-84	01-OCT-90	30-DEC-92
19961	GANITE	11-OCT-73	20-MAR-89	17-JAN-91
19968	ULTRAVATE	02-NOV-87	03-APR-89	17-DEC-90
19979	TICLID	22-SEP-76	15-NOV-89	31-OCT-91
19982	ZEBETA	20-AUG-84	01-AUG-89	31-JUL-92
19998	CHEMET	03-OCT-80	22-AUG-89	30-JAN-91

MEC#	DRUG NAME	IND RECEIPT DATE *	NDA RECEIPT DATE **	NDA APPROVAL DATE
20007	ZOFRAN	20-AUG-86	12-OCT-89	04-JAN-91
20013	MAXAQUIN	28-DEC-87	31-JUL-90	21-FEB-92
20031	PAXIL	22-DEC-83	21-NOV-89	29-DEC-92
20032	SURVANTA	02-JAN-86	02-JAN-90	01-JUL-91
20035	ERGAMISOL	25-FEB-77	01-NOV-89	18-JUN-90
20036	AREIDIA	01-JUN-87	21-DEC-89	31-OCT-91
20038	FLUDARA	29-NOV-82	24-NOV-89	18-APR-91
20043	OMNIFLOX	12-JAN-88	30-NOV-89	30-JAN-92
20044	EXOSURF NEONATAL	01-MAY-85	16-FEB-90	02-AUG-90
20057	CEREDASE	18-JUL-79	24-APR-90	05-APR-91
20068	FOSCAVIR	23-DEC-86	20-SEP-90	27-SEP-91
20070	COGNEX	07-MAY-87	04-JUN-90	09-SEP-93
20071	DESOGEN	16-DEC-88	31-DEC-90	10-DEC-92
20073	ROMAZICON	19-NOV-84	10-DEC-90	20-DEC-91
20080	IMITREX	27-FEB-87	02-JUL-90	28-DEC-92
20083	SPORANOX	07-JUN-84	31-MAY-90	11-SEP-92
20084	IOBENGUANE SULFATE I 131	22-FEB-80	20-DEC-90	25-MAR-94
20091	IMAGENT	09-JAN-73	20-JUN-90	13-AUG-93
20098	MIVACRON	07-JUN-84	30-AUG-90	22-JAN-92
20118	SUPRANE	21-NOV-88	30-JAN-91	18-SEP-92
20119	VUMON	12-JUL-68	28-SEP-90	14-JUL-92
20122	NIPENT	19-JUN-79	11-FEB-91	11-OCT-91
20123	OMNISCAN	13-OCT-88	12-OCT-90	08-JAN-93
20131	PROHANCE	29-DEC-88	13-NOV-90	16-NOV-92
20134	METASTRON	30-AUG-84	07-DEC-90	18-JUN-93
20136	DEMADEX	28-AUG-86	28-FEB-91	23-AUG-93
20151	EFFEXOR	24-OCT-85	26-APR-91	28-DEC-93
20152	SERZONE	18-OCT-82	06-SEP-91	22-DEC-94
20154	VIDEX	28-JUL-88	02-APR-91	09-OCT-91
20164	LOVENOX	19-APR-88	29-JUL-91	29-MAR-93
20180	PROSCAR	23-MAY-86	15-APR-91	19-JUN-92
20184	ACEON	01-SEP-87	28-JUN-91	30-DEC-93
20189	FELBATOL	30-JUN-82	30-SEP-91	29-JUL-93
20191	ALCOMIDE	18-FEB-86	10-JUN-91	23-SEP-93
20192	LAMISIL	09-JUN-83	03-JUL-91	30-DEC-92
20199	HIVID	08-APR-87	31-OCT-91	19-JUN-92
20210	PROPULSID	27-JUN-83	29-AUG-91	29-JUL-93
20214	ZEMURON	16-DEC-88	29-JUN-93	17-MAR-94
20219	LIVOSTIN	05-MAR-86	24-SEP-91	10-NOV-93
20229	LEUSTATIN	20-OCT-86	31-DEC-91	26-FEB-93
20233	RHINOCORT	24-FEB-88	23-DEC-91	14-FEB-94

IND#	DRUG NAME	IND RECEIPT DATE *	MDA RECEIPT DATE **	MDA APPROVAL DATE
20235	NEURONTIN	02-JUN-86	31-JAN-92	30-DEC-93
20236	SEREVENT	02-DEC-87	20-DEC-91	04-FEB-94
20239	KYTRIL	14-JUN-88	17-DEC-91	29-DEC-93
20240	RENORMAX	23-DEC-83	31-DEC-91	29-DEC-94
20241	LAMICTAL	14-MAR-84	23-MAR-92	27-DEC-94
20243	LUVOK	20-OCT-75	30-DEC-91	05-DEC-94
20250	HALFAN	19-MAR-86	07-JAN-92	24-JUL-92
20256	NEUROLITE	18-SEP-87	06-MAR-92	23-NOV-94
20259	MEPRON	12-JUL-89	24-APR-92	25-NOV-92
20261	LESCOL	10-SEP-86	31-MAR-92	31-DEC-93
20262	TAXOL	29-SEP-83	22-JUL-92	29-DEC-92
20272	RISPERDAL	09-AUG-88	15-APR-92	29-DEC-93
20273	DOVONEX	09-OCT-90	31-MAR-92	29-DEC-93
20287	FRAGMIN	01-MAR-85	07-AUG-92	22-DEC-94
20304	TRASYLOL	09-MAY-89	24-NOV-92	29-DEC-93
20306	FLUDEOXYGLUCOSE F 18	NO IND***	23-OCT-92	19-AUG-94
20314	OCTREOSCAN	NO IND***	23-OCT-92	02-JUN-94
20315	ORLAAM	12-FEB-91	21-JUN-93	09-JUL-93
20326	NEUTREXIN	10-MAR-87	01-FEB-93	17-DEC-93
20356	NISOCOR	23-MAY-89	01-APR-93	02-FEB-95
20357	GLUCOPHAGE	26-FEB-86	29-SEP-93	29-DEC-94
20363	FAMVIR	06-JUN-90	30-JUN-93	29-JUN-94
20367	CEREZYME	22-OCT-91	21-MAY-93	23-MAY-94
20388	NAVELBINE	18-JUN-90	27-AUG-93	23-DEC-94
20392	CYSTAGON	17-FEB-93	01-SEP-93	15-AUG-94
20408	TRUSOPT	09-FEB-89	10-DEC-93	09-DEC-94
20412	ZERIT	16-DEC-88	28-DEC-93	24-JUN-94
20474	VEXOL	18-JAN-90	01-JUN-94	30-DEC-94
50601	CERADON	10-APR-80	30-APR-85	30-DEC-88
50621	SUPRAX	02-AUG-83	27-JUN-86	28-APR-89
50633	CEFPYRAMIDE SODIUM	29-JUN-83	31-JUL-87	31-JAN-89
50637	ZEFAZONE	15-APR-83	31-DEC-87	11-DEC-89
50661	IDAMYCIN	18-FEB-81	31-AUG-89	27-SEP-90
50662	BIAXIN	07-AUG-85	20-DEC-89	31-OCT-91
50664	CEFZIL	27-SEP-85	30-MAR-90	23-DEC-91
50667	LORABID	09-APR-87	27-AUG-90	31-DEC-91
50670	ZITHROMAX	28-SEP-84	11-APR-90	01-NOV-91
50674	VANTIN	02-JUL-87	29-MAR-91	07-AUG-92
50684	ZOSYN	14-JUN-88	03-SEP-91	22-OCT-93

IND#	DRUG NAME	IND RECEIPT DATE *	NDA RECEIPT DATE **	NDA APPROVAL DATE
50689	MYCOBUTIN	15-JAN-87	17-JAN-92	23-DEC-92
50708	PROGRAF	02-APR-90	26-JUL-93	08-APR-94

- * When there are multiple INDs and no single IND contains the studies that clearly support the NDA, the first IND received by the agency that is related to the drug is used as the supporting IND.
- ** NDA RECEIPT DATE - the date of receipt of the original NDA, which is not necessarily the date of the fileable application.
- *** NO IND - when another NDA, a DMF (drug master file), or foreign studies contain the clinical studies supporting NDA approval, no supporting IND is listed in the table.

Center for Drug Evaluation and Research

FY 1990 (Actual)	NDA's	NME's	NDA Supp.	Total	ANDA's	ANDA Supp.	Total
Approvals	69	(24)	1,279	1,348	73	2,489	2,562
Completions **	241	(63)	2,085	2,326	1,046	5,102	6,148
Program Outlays (\$000)				\$44,606			\$10,215
Primary Reviewers #				286			54
Program FTEs ##				588			139
Outlays/Approval				\$33,091			\$3,987
Outlays/Completion				\$19,177			\$1,662
Primary Reviewer/Approval				0.212			0.021
Primary Reviewer/Completion				0.123			0.009
FTE/Approval				0.436			0.054
FTE/Completion				0.253			0.023
Outlays/Total FTEs				\$75,861			\$73,489

FY 1991 (Actual)	NDA's	NME's	NDA Supp.	Total	ANDA's	ANDA Supp.	Total
Approvals	62	(26)	1,234	1,296	141	3,413	3,554
Completions **	275	(71)	2,221	2,496	1,096	5,551	6,647
Program Outlays (\$000)				\$54,762			\$23,599
Primary Reviewers #				310			58
Program FTEs ##				630			271
Outlays/Approval				\$42,255			\$6,640
Outlays/Completion				\$21,940			\$3,550
Primary Reviewer/Approval				0.239			0.016
Primary Reviewer/Completion				0.124			0.009
FTE/Approval				0.486			0.076
FTE/Completion				0.252			0.041
Outlays/Total FTEs				\$86,924			\$87,081

FY 1992 (Actual)	NDA's	NME's	NDA Supp.	Total	ANDA's	ANDA Supp.	Total
Approvals	86	(30)	1,415	1,501	239	3,470	3,709
Completions **	279	(69)	2,291	2,570	1,481	5,153	6,634
Program Outlays (\$000)				\$62,736			\$34,326
Primary Reviewers #				313			74
Program FTEs ##				650			328
Outlays/Approval				\$41,796			\$9,255
Outlays/Completion				\$24,411			\$5,174
Primary Reviewer/Approval				0.209			0.020
Primary Reviewer/Completion				0.122			0.011
FTE/Approval				0.433			0.088
FTE/Completion				0.253			0.049
Outlays/Total FTEs				\$96,517			\$104,652

FY 1993 (Actual)	NDA's	NME's	NDA Supp.	Total	ANDA's	ANDA Supp.	Total
Approvals	83	(26)	1,308	1,391	215	2,635	2,850
Completions **	241	(65)	2,028	2,269	1,136	3,969	5,105
Program Outlays (\$000)				\$79,080			\$31,485
Primary Reviewers #				312			68
Program FTEs ##				769			331
Outlays/Approval				\$56,851			\$11,047
Outlays/Completion				\$34,852			\$6,167
Primary Reviewer/Approval				0.224			0.024
Primary Reviewer/Completion				0.138			0.013
FTE/Approval				0.553			0.116
FTE/Completion				0.339			0.065
Outlays/Total FTEs				\$102,835			\$95,121

FY 1994 (Actual)	NDA's	NME's	NDA Supp.	Total	ANDA's	ANDA Supp.	Total
Approvals	62^			1,681	255	2,486	2,741
Completions **	191	(24)	1,619	2,656	1,196	3,879	5,075
Program Outlays (\$000)		(61)	2,465	\$96,007			\$35,846
Primary Reviewers #				411			65
Program FTEs ##				824			331
Outlays/Approval				\$57,113			\$13,078
Outlays/Completion				\$36,147			\$7,063
Primary Reviewer/Approval				0.244			0.024
Primary Reviewer/Completion				0.155			0.013
FTE/Approval				0.490			0.121
FTE/Completion				0.310			0.065
Outlays/Total FTEs				\$116,513			\$108,296

^Type 6 NDA's are included in Supplement counts starting with FY 94. This figure was previously reported as 69 before this change.

FY 1995 (Estimate)	NDA's	NME's	NDA Supp.	Total	ANDA's	ANDA Supp.	Total
Approvals	76	(28)	1,700	1,776	275	2,500	2,775
Completions **	220	(70)	2,600	2,820	1,300	3,900	5,200
Program Outlays (\$000)				\$108,768			\$36,740
Primary Reviewers #				426			67
Program FTEs ##				974			312
Outlays/Approval				\$61,243			\$13,240
Outlays/Completion				\$38,570			\$7,065
Primary Reviewer/Approval				0.240			0.024
Primary Reviewer/Completion				0.151			0.013
FTE/Approval				0.548			0.112
FTE/Completion				0.345			0.060
Outlays/Total FTEs				\$111,671			\$117,756

Footnotes:

* NME's are a subset of NDA's, therefore, "Total" is the sum of NDA's plus NDA Supplements.

@ Figures for ANDA approvals and completions correspond to the counting system in place until January 1, 1991.

Generally, this system counts each strength as a separate ANDA. Newer rules permit applicants to collapse submissions for certain combinations of strengths as a single ANDA. OGD continues to use the old counting system to report workload but provides a comparison to the new counting method, e.g., 5 approvals (old system) may equal 3 approvals in the new system.

** Completions here means total actions and includes approvable, not approvable, approved, withdrawn, and refuse-to-file.

Primary Reviewers include Medical Officers, Psychologists, Pharmacologists, Pharmacists, Physiologists, Toxicologists, Dental Officers, Chemists, Microbiologists, and Mathematical Statisticians for NDA's, NME's, and NDA Supplements. Primary Reviewers for ANDA's include the Chemistry staff, bioequivalence staff and labeling staff.

FTE Assigned (Program) includes Center, Field, and Agency overhead as well as all reviewers shown here as primary.

Center for Biologics and Research Evaluation

The number of approvals does not capture all of the review actions which occur. For that reason I am including the number of review completions or actions. There is a problem in splitting the resources (dollars and FTE) among the application types or classes. The Agency does not track its resources by application type, but by Program, i.e., Biologics, Human Drugs, and Medical Devices and Radiological Health. The Program reviewers do not specialize in one type of application. The same reviewers review multiple types of applications i.e., original applications, supplements, investigational new drug applications (INDs), etc. The information follows:

BIOLOGICS PROGRAMFY 1990 (Actual)

	PLA		ELA		
	<u>PLAs</u>	<u>SUPMTs</u>	<u>ELAs</u>	<u>SUPMTs</u>	<u>TOTALS</u>
Approvals	70	314	29	156	569
Completions 1/	90	364	35	196	685
Program Outlays (\$000) 2/				25,645	
Primary Reviewers (FTE) 3/				274	
Program FTE 4/				775	

Ratios

1. Outlays(\$000)/approvals - $\$25,645/569 = \$45.1/\text{approval}$
2. Outlays(\$000)/completions - $\$25,645/685 = \$37.4/\text{completion}$
3. Primary reviewer/approvals - $274/569 = .48 \text{ reviewer/approval}$
4. Primary reviewer/completions - $274/685 = .4 \text{ reviewer/completion}$
5. FTE/approvals - $775/569 = 1.36 \text{ FTE/approval}$
6. FTE/completions - $775/685 = 1.13 \text{ FTE/completion}$
7. Outlays(\$000)/primary reviewer - $\$25,645/274 = \$93.6/\text{reviewer}$

FY 1991 (Actual)

	PLA		ELA		
	<u>PLAs</u>	<u>SUPMTs</u>	<u>ELAs</u>	<u>SUPMTs</u>	<u>TOTALS</u>
Approvals	60	363	19	139	581
Completions 1/	77	409	24	150	660
Program Outlays (\$000) 2/				29,092	
Primary Reviewers (FTE) 3/				287	
Program FTE 4/				824	

Ratios

1. Outlays(\$000)/approvals - $\$29,092/581 = \$50.1/\text{approval}$
2. Outlays(\$000)/completions - $\$29,092/660 = \$44.1/\text{completions}$
3. Primary reviewer/approvals - $287/581 = .49 \text{ reviewers/approval}$
4. Primary reviewer/completions - $287/660 = .43 \text{ reviewer/completion}$
5. FTE/approvals - $824/581 = 1.42 \text{ FTE/approval}$
6. FTE/completions - $824/660 = 1.25 \text{ FTE/completion}$
7. Outlays(\$000)/primary reviewer - $\$29,092/287 = \$101.4/\text{reviewer}$

FY 1992 (Actual)

	PLAs	PLA SUPMTs	ELAs	ELA SUPMTs	TOTALS
Approvals	41	570	13	136	760
Completions 1/	51	635	14	150	850
Program Outlays (\$000) 2/				31,699	
Primary Reviewers (FTE) 3/				321	
Program FTE 4/				898	

Ratios

1. Outlays(\$000)/approvals - $\$31,699/760 = \$41.7/\text{approval}$
2. Outlays(\$000)/completions - $\$31,699/850 = \$37.3/\text{completion}$
3. Primary reviewer/approvals - $321/760 = .42 \text{ reviewer/approval}$
4. Primary reviewer/completions - $321/850 = .38 \text{ reviewer/completion}$
5. FTE/approvals - $898/760 = 1.18 \text{ FTE/approval}$
6. FTE/completions - $898/850 = 1.06 \text{ FTE/completion}$
7. Outlays(\$000)/primary reviewer - $\$31,699/321 = \$98.8/\text{reviewer}$

FY 1993 (Actual)

	PLAs	PLA SUPMTs	ELAs	ELA SUPMTs	TOTALS
Approvals	31	502	9	197	739
Completions 1/	55	638	17	267	977
Program Outlays (\$000) 2/				35,868	
Primary Reviewers (FTE) 3/				348	
Program FTE 4/				969	

Ratios

1. Outlays(\$000)/approvals - $\$38,868/739 = \$48.5/\text{approval}$
2. Outlays(\$000)/completions - $\$38,868/977 = \$36.7/\text{completion}$
3. Primary reviewer/approvals - $348/739 = .47 \text{ reviewer/approval}$
4. Primary reviewer/completions - $348/977 = .36 \text{ reviewer/completion}$
5. FTE/approvals - $969/739 = 1.31 \text{ FTE/approval}$
6. FTE/completions - $969/977 = .99 \text{ FTE/completion}$
7. Outlays(\$000)/primary reviewer - $\$38,868/348 = \$103.1/\text{reviewer}$

FY 1994 (Actual)

	PLAs	PLA SUPMTs	ELAs	ELA SUPMTs	TOTALS
Approvals	24	536	10	251	821
Completions 1/	58	671	23	285	1,037
Program Outlays (\$000) 2/				59,182	
Primary Reviewers (FTE) 3/				396	
Program FTE 4/				1,103	

Ratios

1. Outlays(\$000)/approvals - $\$59,182/821 = \$72.1/\text{approval}$
2. Outlays(\$000)/completions - $\$59,182/1,037 = \$57.1/\text{completion}$
3. Primary reviewer/approvals - $396/821 = .48 \text{ reviewer/approval}$
4. Primary reviewer/completions - $396/1,037 = .38 \text{ reviewer/completion}$
5. FTE/approvals - $1,103/821 = 1.34 \text{ FTE/approval}$
6. FTE/completions - $1,103/1,037 = 1.06 \text{ FTE/completion}$
7. Outlays(\$000)/primary reviewer - $\$59,182/396 = \$149.4/\text{reviewer}$

FY 1995 (Estimate)

	PLAs	PLA SUPMTs	ELAs	ELA SUPMTs	TOTALS
Approvals	30	540	10	250	830
Completions 1/	60	670	25	285	1,040
Program Outlays (\$000) 2/				63,885	
Primary Reviewers (FTE) 3/				462	
Program FTE 4/				1,171	

Ratios

1. Outlays(\$000)/approvals - $\$63,885/830 = \$77.0/\text{approval}$
2. Outlays(\$000)/completions - $\$63,885/1,040 = \$61.4/\text{completion}$
3. Primary reviewer/approvals - $462/830 = .56 \text{ reviewer/approval}$
4. Primary reviewer/completions - $462/1,040 = .44 \text{ reviewer/completion}$
5. FTE/approvals - $1,171/830 = 1.41 \text{ FTE/approval}$
6. FTE/completions - $1,171/1,040 = 1.13 \text{ FTE/completion}$
7. Outlays(\$000)/primary reviewer - $\$63,885/462 = \$138.3/\text{reviewer}$

FY 1996 (Estimate)

	PLAs	PLA SUPMTs	ELAs	ELA SUPMTs	TOTALS
Approvals	30	540	10	250	830
Completions1/	60	670	25	285	1,040
Program Outlays (\$000) 2/				66,320	
Primary Reviewers (FTE) 3/				479	
Program FTE 4/				1,183	

Ratios

1. Outlays(\$000)/approvals - $\$66,320/830 = \$79.9/\text{approval}$
2. Outlays(\$000)/completions - $\$66,320/1,040 = \$63.8/\text{completion}$
3. Primary reviewer/approvals - $479/830 = .58 \text{ reviewer/approval}$
4. Primary reviewer/completions - $479/1,040 = .46 \text{ reviewer/completion}$
5. FTE/approvals - $1,183/830 = 1.43 \text{ FTE/approval}$
6. FTE/completions - $1,183/1,040 = 1.14 \text{ FTE/completion}$
7. Outlays(\$000)/primary reviewer - $\$66,320/479 = \$138.5/\text{reviewer}$

Notes:

- 1/ Completions include approved, denied and withdrawn.
- 2/ Program outlays are total Application Review outlays from Exhibit J.
- 3/ Primary reviewers are Application Review Total from Exhibit J.
- 4/ Program FTE include Center, Field and Agency overhead FTE.

Center for Medical Devices and Radiological Products

In addition to the information and ratios requested for approvals, the number of review completions is also included. Review completions include the disapproved, transferred or withdrawn applications as well as those approved. Since considerable staff time is spent on these applications even if they are not ultimately approved, we suggest that ratios be calculated considering the number of applications completed rather than using only the number of applications approved although only the requested ratios are shown.

CENTER FOR DEVICES AND RADIOLOGICAL HEALTH

Medical Device Approval Process

<u>FY 1990 (Actual)</u>	<u>PMA SUPMTs</u>	<u>510(k)s</u>
Approvals	47	4748
Final Actions **	77	6197
Program Outlays (\$000) *	\$5,580	\$8,055
Primary Reviewers (FTE) (Center) #	45	67
FTE Assigned (Program Total) ##	81	120
Outlays/approval	\$118,723	\$1,696
Approvals/Reviewer	1.04	70.87
Approvals/FTE	0.58	39.57
Outlays/Reviewer (FTE Assigned)	\$68,889	\$67,121

<u>FY 1991 (Actual)</u>	<u>PMA SUPMTs</u>	<u>510(k)s</u>
Approvals	27	4294
Final Actions	56	5367
Program Outlays (\$000)	\$6,131	\$8,913
Primary Reviewers (FTE) (Center)	49	73
FTE Assigned (Program Total)	88	131
Outlays/approval	\$227,081	\$2,076
Approvals/Reviewer	0.55	58.82
Approvals/FTE	0.31	32.78
Outlays/Reviewer (FTE Assigned)	\$69,673	\$68,040

FY 1992 (Actual)	PMA SUPMTs	510(k)s
Approvals	12	3776
Final Actions	36	4862
Program Outlays (\$000)	\$6,268	\$8,992
Primary Reviewers (FTE) (Center)	48	71
FTE Assigned (Program Total)	86	126
Outlays/approval	\$522,327	\$2,381
Approvals/Reviewer	0.25	53.18
Approvals/FTE	0.14	29.97
Outlays/Reviewer (FTE Assigned)	\$72,883	\$71,366

FY 1993 (Actual)	PMA SUPMTs	510(k)s
Approvals	24	4007
Final Actions	55	5073
Program Outlays (\$000)	\$6,113	\$10,172
Primary Reviewers (FTE) (Center)	45	78
FTE Assigned (Program Total)	80	140
Outlays/approval	\$254,689	\$2,539
Approvals/Reviewer	0.53	51.37
Approvals/FTE	0.30	28.62
Outlays/Reviewer (FTE Assigned)	\$76,407	\$72,660

FY 1994 (Actual)	PMA SUPMTs	510(k)s
Approvals	26	5496
Final Actions	54	7217
Program Outlays (\$000)	\$8,874	\$14,560
Primary Reviewers (FTE) (Center)	60	104
FTE Assigned (Program Total)	107	188
Outlays/approval	\$341,308	\$2,648
Approvals/Reviewer	0.43	52.87
Approvals/FTE	0.24	29.24
Outlays/Reviewer (FTE Assigned)	\$82,935	\$77,447

FY 1995 (Estimate)	PMA SUPMTs	510(k)s
Approvals	25	4508
Final Actions	51	5799
Program Outlays (\$000)	\$8,873	\$15,409
Primary Reviewers (FTE) (Center)	60	110
FTE Assigned (Program Total)	107	197
Outlays/approval	\$354,912	\$3,418
Approvals/Reviewer	0.42	40.98
Approvals/FTE	0.23	22.88
Outlays/Reviewer (FTE Assigned)	\$82,923	\$78,220

FY 1996 (Estimate)	PMA SUPMTs	510(k)s
Approvals	25	4613
Final Actions	75	5934
Program Outlays (\$000)	\$11,257	\$17,693
Primary Reviewers (FTE) (Center)	60	110
FTE Assigned (Program Total) +	138	224
Outlays/approval	\$450,272	\$3,836
Approvals/Reviewer	0.42	41.94
Approvals/FTE	0.18	20.59
Outlays/Reviewer (FTE Assigned)	\$81,571	\$78,988

Notes:

* Final actions include approved, not approved, denied, transferred and withdrawn applications.

* Program outlays include Center operating \$ and FTE costs.

Based on 58 percent of FTE Assigned

All Center FTEs

+ Includes additive User Fee FTEs

The row marked Program Outlays represents the sum of Center operating expenditures and FTE costs. Since reviewers are not limited to working on only one class of application these FTEs and the associated costs have been estimated. This figure has been divided by the number of primary reviewers for each class of application to arrive at the ratios shown in Outlays/Approval.

The number of primary reviewers shown in the accompanying table were calculated based on information in the CDRH User Fee Model as 56 percent of the FTEs assigned to the various program classifications for each fiscal year. The ratio is calculated by dividing the number of approvals in each program class by the number of primary reviewers.

The number of approvals in each category is divided by the number of FTE assigned for the program to arrive at the ratios shown under Approvals per FTE.

Relevant ratios utilizing the Program Outlays and Number of Reviewers are shown. The FY 93 estimate of assigned FTE working on the 510(k) program includes 24 FTEs loaned from OST.

DRUG/MEDICAL DEVICE APPROVALS

Question. Many reports indicate that American pharmaceutical and medical device manufacturers are taking some of their innovative new drugs and devices overseas as a result of the length of time that it takes to get a new drug or device approved in the United States. Therefore, please provide the Subcommittee with the following information: for each new drug and Class III medical device approved in fiscal year 1994 (and as available for fiscal year 1995), the date on which the drug was approved and the date on which an Investigational New Drug ("IND") or Investigational Device Exemption ("IDE") application for that drug or device was first filed; for all "breakthrough drugs" approved since fiscal year 1989, the date the drug was approved and the date on which an IND application for that drug was first filed; and for each fiscal year beginning in 1989, the number applications received by the FDA for admission into the FDA's expedited drug and device review procedure and the number of such applications approved?

Answer. I will be happy to provide this information for the record.

[The information follows:]

Center for Drug Evaluation and Research

NDAs Under Expedited Review

	<u>Receipt</u>	<u>Approvals</u>
FY 1989	7	6
FY 1990	9	9
FY 1991	4	4
FY 1992	4	3
FY 1993	6	6
FY 1994	2	1

Notes:

- (1) Expedited Review refers to Subpart E, and accelerated approval (Subpart H).
- (2) The number of NDAs under expedited review is based on the year of receipt.
- (3) NDA Approval is not necessarily in the same FY as receipt.
- (4) There are also NDA supplements under expedited review which are not included in these counts.

Treatment INDs

Protocol Allowed to
Receipts Proceed

FY 1989	9	7
FY 1990	7	5
FY 1991	3	2
FY 1992	9	6
FY 1993	3	2
FY 1994	5	3

Notes:

- (1) The number of Treatment INDs is based on the year of receipt of the treatment protocol.
- (2) The year the IND is allowed to proceed is not necessarily in the same FY as receipt.

Center for Medical Devices and Radiological Products

The following chart identifies the 26 PMA's that were approved in FY 94 and 8 that have been approved, to date, in FY 95. Where applicable, the receipt dates of IDE's have been included.

<u>Device Name (Applicant)</u>	<u>Date Approved</u>	<u>IDE Received</u>
Soft Contact Lens (Nissel)	11/26/93	No IDE
Transvenous Defibrillation		
Lead System (Medtronic)	12/09/93	02/26/90
Lens Cleaner (CIBA)	01/10/94	NSR*
Aware Test System		
(American Drug Screens)	01/18/94	Exempt
Rigid Gas Permeable Contact Lens		
(Stellar Contact Lens, Inc.)	01/24/94	NSR*
Lens Saline Solution		
(KC Pharmaceuticals)	02/28/94	No IDE
Bone Growth Stimulator		
(Orthologic Corp.)	03/04/94	03/30/89
Soft Contact Lens		
(United Contact Lens)	03/07/94	No IDE
Pacemaker Pulse Generator		
(PACE Medical)	03/10/94	No IDE
Neuromuscular Stimulator		
(Sigmedics, Inc.)	04/20/94	NSR*
Intraocular Lens		
(Allergan Medical)	05/26/94	08/07/85
Contact Lens Solution		
(Wesley-Jessen)	06/01/94	NSR*
Balloon Catheter		
(Grieshaber & Co.)	06/02/94	No IDE
Implantable Defibrillator		
(Cardiac Pacemakers)	06/17/94	07/27/90
CEA Assay (PB Diagnostics)	06/20/94	Exempt
Balloon Catheter (Toray Industries)	06/28/94	04/03/89
Balloon Stent (J & J)	08/02/94	11/06/87

Ultrasound Contrast Microspheres (Molecular Biosystems)	08/05/94	08/19/87
CEA Assay (Ciba Corning)	08/23/94	Exempt
Intraocular Lens (IOLAB Corp)	09/02/94	07/31/87
PSA Test Kit (Ciba Corning Diag.)	09/02/94	Exempt
PTCA Catheter (Scimed Life Systems)	09/28/94	No IDE
PTCA Catheter with Ultrasound (Endosonics Corp)	09/30/94	04/18/90
Left Ventricular Assist Device (Thermo Cardiosystems, Inc.)	09/30/94	04/02/85
Chorionic Villus Sampling Set (Cook OB/GYN)	09/30/94	11/19/85
Extended Wear Contact Lens (Pilkington Barnes Hind)	09/30/94	No IDE
Bone Growth Stimulator (Exogen)	01/05/94	10/18/85
Vascular Prosthesis (C.R. Bard)	10/21/94	07/29/88
Cardio Ablation System (EP Technologies)	10/28/94	11/19/90
Silicone Oil (Chiron Vision Corp)	11/04/94	08/17/88
Intraocular Lens (Alcon)	12/22/94	06/06/90
Cardiac Catheter Ablation System (Medtronic)	02/09/95	04/06/92
Lithotripter (Karl-Storz Endoscopy America)	02/17/95	01/25/90
Contact Lens Solution (Polymer Technology)	03/01/95	NSR*

* NSR means device is a non-significant risk which does not need an IDE.

Expedited Review PMA's

	<u># Received</u>	<u># Expedited</u>
FY 89	84	1
FY 90	79	0
FY 91	75	1
FY 92	65	4
FY 93	40	3
FY 94	43	7
FY 95	15	2

Question. Discuss the effectiveness or any shortcomings of these programs.

Answer. These programs have been quite effective in speeding up the review process. Drug development is expedited for products which offer treatment for serious and life threatening diseases where approved therapies

are not available or effective. Development is expedited in two ways: first, through earlier and expanded access to investigational products; and second, by earlier FDA-sponsor interactions and expedited review procedures as described, in part, by Subpart E.

The expanded access mechanisms are the parallel track policy which makes promising investigational drugs for HIV-related diseases more widely available while the controlled clinical trials essential to establish the safety and effectiveness of new drugs are carried out; the treatment IND regulation, which provides protocols for the use of experimental drugs in clinical practice when controlled trials demonstrate that there may be benefit and while marketing approval is being pursued; and accelerated approval, which allows the approval of promising new drugs based on surrogate marker data on the condition that studies to verify clinical benefit be completed. Additional mechanisms include the Group C cancer drugs, and single patient protocols--emergency IND and compassionate use.

The use of these mechanisms can be illustrated with the experience with drugs for HIV infections and AIDS. AIDS drugs which have used the Treatment IND, initiated in 1987, include zidovudine--AZT, Retrovir--, trimetrexate, aerosolized pentamidine, atovaquone, didanosine, and zalcitabine. Parallel track, initiated in 1992, programs included didanosine and Zerit--d4t. Ganciclovir, liposomal amphotericin products, and spiramycin are some of the products with large single patient protocol programs. Together, these programs have reached over 60,000 patients. For perspective, in the same time period, the largest AIDS clinical trials group, the ACT of the NIH, enrolled 27,000 participants in all of its trials of all agents combined. Most of the products mentioned above have been approved or continue in active studies. In the case of trimetrexate, the Treatment IND continued to provide the drug during a several year hiatus after the first commercial sponsor decided not to pursue the product, and the time when a second sponsor completed the approval application.

The expedited review procedures begin before an IND is submitted with pre-IND consultation for products for serious and life-threatening diseases. This prevents many delays by assuring more complete initial submissions. Sponsors meet with the New Drug Divisions at multiple steps in drug development and for AIDS drugs, are offered the opportunity to meet with the Advisory Committees when planning an accelerated approval application. The review of promising agents begins during the IND phase resulting in rapid NDA reviews and actions. The approval of new molecular entities for AIDS averages seven months (and has been as short as 105 days) from the time of application arrival to marketing permission.

FDA expanded its expedited review program for devices that offer significant clinical benefit over existing products on June 30, 1993. To date, 9 of the 18 PMA's that have been expedited have been approved.

FDA has several goals in 1995 for the PMA and IDE programs. In the PMA program, we recently initiated a program management pilot project. Project management describes a process of prospectively planning, organizing, and managing work and resources to accomplish a defined objective which has constraints of time and resources. This management tool will be expanded to the entire PMA program following validation of the software and process models in the pilot project.

The primary goals for the IDE program are to increase the quality of IDE submissions and reduce the number of review cycles to approval. To achieve these goals, FDA will encourage more meetings with sponsors before the IDE is submitted. Pre-IDE meetings should serve to increase the sponsors' understanding of various FDA requirements, regulations, and guidance documents and thus lead to more complete original IDE applications. FDA will also promote a more interactive review process. FDA believes that, by communicating frequently with industry during the review process, rather than only at the completion of the review, deficient information may be satisfied within fewer review cycles.

OVERSEAS INSPECTIONS

Question. The FDA is required to make inspections of plants shipping products requiring FDA approval into the U.S. on the same basis as inspections are carried out in the U.S., both pre-approval and post-approval.

Please provide the following information for FY 1990-1994 and, where available, FY 1995: the number of overseas establishments that are subject to FDA inspection (post-approval) and the frequency of inspection by type of establishment; the number of requests for pre-approval inspections and the average length of time between request and inspection; the estimated cost of time and travel to inspect such establishments; and for establishments exporting finished drug products to the U.S., please provide the average duration of each inspection and the average duration of each inspection of comparable U.S.-based establishments.

Answer. I will be happy to provide this information for the record.

[The information follows:]

1. the number of overseas establishments that are subject to FDA inspection (post-approval) and the frequency of inspection by type of establishment

While it is true that the FD&C Act makes no distinction between foreign and domestic products, FDA's inspectional obligations under the Act differ. There is no inspectional obligation specifically related to foreign manufacturers.

The information requested for the number of establishments that are subject to FDA inspection has not been maintained historically. The data provided is derived from the current number of establishments which FDA has inspected. This data changes daily as new establishments are added and inactive ones are removed. It can be said that the inventory has steadily grown since the foreign inspection program started.

The data available currently is broken down by Medical Device and Human/Veterinary Drug establishments:

FY	Device Est.	Human Drug Est.	Vet. Drug Est.
1995	1260	1063	13

2. the number of requests for pre-approval inspections and the average length of time between request and inspection

The number of pre-approval inspections, both drug and medical devices, has grown since the inception of the foreign inspection program.

The data provided shows Drug pre-approval requests for establishments in countries with which the FDA has a Memorandum of Understanding (Canada, Sweden, and Switzerland) separately from those requests for other foreign countries. No historical data exists for the average length of time between these requests and completion of the inspection.

Historical data for medical device pre-approval inspections is not available prior to FY 1994. In addition to Device PMA pre-approval inspections, we began performing 510(k) pre-market clearance inspections for medical devices in FY 1994.

Similarly, prior to FY 1994, no historical data exists for the average length of time between these requests and completion of the inspection. In FY 1994, the average length of time between receipt of the request and completion of the inspection was approximately 1.75 months for PMA and approximately 2.2 months for 510(k) pre-clearance inspections. It takes from 4 to 8 weeks to

obtain all the necessary clearances and plan an inspection trip. In FY 1995, the average time has been approximately 3 months for PMA and approximately 3.4 months for 510(k) pre-clearance inspections. Please note that these averages are high because of delays by the manufacturing establishments. Two establishments delayed for 6 months prior to the scheduling of their 510(k) pre-clearance inspections.

FY	Drug Pre-Approval Requests		Device Pre-Approval Requests	
		MOU	PMA	510 (k)
1990	10	1	n/a	n/a
1991	196	40	n/a	n/a
1992	315	133	n/a	n/a
1993	244	59	n/a	n/a
1994	357	61	13	12
1995 *	167	44	5	12

* FY 1995 data is from 10/01/94 through 03/01/95.

3. the estimated cost of time and travel to inspect such establishments

The information available to address the question of estimated cost of time and travel to inspect active establishments is shown below. The data reflects the differences between program areas (Drug versus Device) and how the time allotted per inspection has changed historically.

From FY 1990 through FY 1993, cost per inspection was figured without differentiation between program areas. However, it should be noted that FDA utilizes a team approach approximately 40% of the time to conduct Drug pre-approval inspections. This is clearly reflected in the FY 1994 and FY 1995 data. These teams normally consist of an investigator and an analyst. Drug pre-approval inspections have historically cost more than single person Device pre-approval inspections.

Fiscal Year	Device Travel cost/ insp	Pre-Approval Device insp/ cost **	Drug Travel cost/ insp	Pre-Approval Drug insp/ cost **
1990	\$1108	\$ 467	\$1108	\$ 589
1991	\$1705	\$1458	\$1705	\$ 688
1992	\$1335	\$ 939	\$1335	\$ 736
1993	\$1875	\$1041	\$1875	\$1116
1994	\$1843	\$1153	\$2087	\$1493
1995*	\$2416	\$ 730	\$2700	\$1135

* At this time, FY 1995 costs can only be based on projected costs.

** Investigator on-site costs only.

4. for establishments exporting finished drug products to the U.S., please provide the average duration of each inspection and the average duration of each inspection of comparable U.S.-based establishments

The average number of hours spent on inspection of manufacturers of finished dosage form drugs for the years FY1990-FY1995 (to date) were as follows:

<u>Fiscal Year</u>	<u>Foreign Inspections Hrs/EI</u>	<u>Domestic Inspections Hrs/EI</u>
1995 (4 months)	91	70
1994	74	78
1993	66	73
1992	104	69
1991	45	83
1990	68	65

OVERSEAS ESTABLISHMENTS

Question. Please provide an explanation of how overseas establishments of drug and device producers can be competently inspected when the production records are not kept in English and key personnel do not speak English. How does FDA assure that the standards are comparable?

Answer. While it is true that records are not always maintained in English, all correspondence from the firm must be provided to FDA in English. This means that all applications received by the Agency are in English. This documentation is generally available to the investigators prior to the foreign inspection.

In addition to the applications described above, prior to inspection, a request is made of foreign drug establishments to provide a list of specific documentation in English. This list includes documentation which must be reviewed and/or evaluated during an inspection and is intended as an inspectional aid for the investigator prior to the inspection.

Also available to the investigators' prior to inspection are previous inspection reports, which explain the firm's organizational structure as well as manufacturing and quality assurance operations.

Although procedures that are not in English cannot be read, explanations of the procedures can be elicited from the firm's representatives, either directly or through the interpreter. Quality assurance practices can readily be evaluated in this manner. Quality assurance practices (as opposed to procedures) are extremely important in the evaluation of a quality assurance system.

All analytical data, which includes product specifications is readily reviewable regardless of language. During pre-approval inspections, data integrity is one of the inspectional aims.

FDA also has a number of multi-lingual investigators and analysts in the foreign inspection cadre. These investigators' talents are utilized as much as possible in order to address this issue.

QUALITY OF INSPECTIONS

Question. There are widely alleged differentials between the quality of drug and device establishment inspections among FDA districts in the U.S. Please explain how the Agency assures consistency from its drug and device inspection force.

Answer. The Agency becomes aware from time to time of non-specific allegations by the regulated industry of differences in inspections conducted by various investigators. We have not received specific information which leads us to believe that there are, in fact, widespread differentials between district inspectional policies and practices. For many years, it has been Agency policy to encourage firms that believe they have been treated inappropriately to provide FDA with sufficient specific information for it to investigate the allegations and implement corrective actions if the allegations are found to have merit. The Office of the Commissioner, in fact, has an Ombudsman to assist persons in dealing with Agency components.

FDA inspections in all geographic areas are conducted using the same inspectional guidance, found in compliance programs and in the Investigations Operations Manual. We provide all investigators with the same basic law and evidence development early in their careers and with additional specialized training depending upon the industry segments in which they will spend most of their inspectional time.

Reports of inspectional findings are reviewed by supervisory inspectional personnel using the same FDA-wide standards to determine if the inspection should result in FDA regulatory or administrative action to correct the documented violations. Monthly conference calls are conducted between District inspection branch directors and FDA headquarters and augmented by periodic inspection-related guidance documents from headquarters to further ensure uniformity of action. The Agency's compliance programs which direct inspections are subject to periodic evaluation by Center personnel as an additional check on inspectional actions.

Even though available facts do not establish that a problem exists, the perception of a problem nevertheless requires outreach efforts to understand and respond to industry concerns. Through FDA headquarters and Field participation in seminars with trade associations and meetings with individual firms, we seek to provide the regulated industry with a clearer picture of what is expected of them and of our own staff.

Question. Please provide any documents that discuss differentials in inspection quality or standards and possible remedies to such differentials.

Answer. We have no such documents, and we have not been made aware of problems in need of such remedies. A remedy would have to be crafted to suit the particulars of the situation involved, e.g., refresher training.

RESOURCE ALLOCATION AND PRIORITIES

Question. Critics of FDA's management contend that it has failed to adequately establish priorities and focus Agency resources efficiently and effectively. For instance, a former high ranking official at the FDA reports that the FDA's management spends too much time and money advancing the interests of its Commissioner by "publicity mongering" instead of focusing management's resources on internal operations. Dr. Kessler, please explain how your budget requests for fiscal year 1996 will reallocate the Agency's resources so as to focus more on the FDA's core mission and describe generally any cuts that you propose to make in expenditures for media speeches, public relations and the like.

* The Food & Drug Letter, July 29, 1994 interview with Gerald Meyer, formerly of the FDA's Drug Center.

Answer. The primary nature and regulatory purpose of OPA is to explain to Americans actions taken by the agency -- or actions consumers themselves should take -- to protect and promote the public health. This function is by no means carried out exclusively by using the press, TV and radio broadcasts.

For example, during the last fiscal year, OPA engaged in numerous educational activities involving schools, consumer groups, clubs and civic organization to inform the public about the benefits of the new food label. Similar activities were undertaken to explain the principles of the Hazard Analysis Critical Control Points (HACCP), a major initiative to increase the safety of seafood, and FDA's updated Model Food Code for state and local governments, whose purpose is to prevent foodborne diseases at the retail level. OPA also coordinated with Environmental Protection Service and the U.S. Department of Agriculture on food initiatives connected with pesticide reform and dioxin reassessment, and worked with the Department of Health and Human Services on the creation and announcement of the AIDS Drug Development Task Force.

The majority of OPA's 70.4 FTEs handle tasks aimed at public health education activities and statutory obligations of FDA. In addition to the already described activities, 24 editors, writers and other staffers in the communications section, OPA's most sizable component, write, edit and publish a widely distributed consumer magazine, produce an internal newsletter for FDA employees, and generate visual information for FDA conferences and seminars. Another 22 OPA employees respond annually to more than 50,000 inquiries by industry, the media, and others that are submitted to the agency under the Freedom of Information Act.

The press section has 13 professionals and 7 support personnel whose primary job is to answer thousands of media queries annually received about regulated products, FDA policies and other public health matters within FDA's purview. In addition, the staff writes and disseminates press releases, talk papers and backgrounders on newly approved health care products, tampering and other public health hazards, and important agency initiatives.

There are 3 speech writers on OPA's staff. In addition to writing speeches for all senior managers of FDA, they write and edit reports, testimonies, and scientific articles for the senior managers of the agency.

PUBLIC AFFAIRS STAFFING

Question. Dr. Kessler, this Subcommittee is looking at all possible ways to streamline your Agency's functions and to reduce wasteful spending. Therefore, we are concerned when we hear reports by your critics that you spend too much of your time and your Agency's resources promoting your own public image. For example, the FDA reported that, as of September 17, 1994, its Office of Public Affairs was staffed by 73.5 full-time equivalents despite a ceiling for the fiscal year of 70. On this date the Center for Drug Evaluation and Research was 11.8 full-time equivalents under its ceiling. How do you propose in FY 96 to reallocate your FTEs more effectively?

Answer. Regarding the staffing of the Office of Public Affairs, it is correct that at the end of FY 1994 OPA's employment level was 73.5 full-time equivalents. Since then, however, the OPA staffing has dropped by more than 3 FTEs to the current level of 70.4 FTEs. We are confident that by the end of the current fiscal year, OPA will reach its FY 1995 ceiling of 69 FTEs.

COSTS OF REGULATING TOBACCO

Question. Dr. Kessler, for the last year you have been talking about the FDA's potential regulation of tobacco products as "drugs." Putting aside the merits, such as whether or not the FDA has the legal authority to, or as a policy matter should, act without congressional action, what I want to know is what would be the potential costs (dollars and FTEs) of regulating this huge industry; what resources would the Agency bring to bear in so doing and from what statutory and regulatory responsibilities would such resources be diverted?

Answer. We are still investigating and evaluating the regulatory options available should the Agency conclude that nicotine-containing tobacco products are

drugs subject to the requirements of the Federal Food, Drug, and Cosmetic Act. In order to be in a position to responsibly calculate the cost to the Agency of any specific regulatory approach, we would first need to conclude our investigation, so that we have the proper factual basis on which to base estimates. It is safe to assume, however, that the cost to the government and the nation of implementing any successful tobacco control program would be trivial compared to the enormous cost of the millions of Americans currently addicted to nicotine-containing tobacco products.

Question: I am also concerned about the ancillary costs that would be involved. You yourself talked about the emergence of a potential black market and a possible "weaning period." This would appear to bring into play the resources of other agencies besides FDA, would it not?

Answer: It would be premature to speculate whether other agencies or their resources would come into play without further details.

BIOLOGICAL PRODUCT APPROVALS AND USER FEES

Question. I am very concerned that the FDA appears to view the infusion of more resources as the panacea for every one of its ills. Experience has shown that not to be the solution. For example, the number of biological product licenses issued by the FDA has declined each fiscal year since 1991: 75 such licenses were issued in 1991, 63 in 1992, 55 in 1993, and only 24 in 1994. The number of these applications received by the FDA has remained fairly constant over this same time period. The FDA began collecting user fees for certain biological product license applications in 1993. Dr. Kessler, in light of this data, how can you assure this Subcommittee that your proposed dollars for FY 96 will be used to improve the FDA's performance in product approvals?

Answer. The Prescription Drug User Fee Act of 1992 (PDUFA), explicitly defines those FDA activities for which user fees may be used. The Act also requires the Secretary of Health and Human Services to submit within 120 days after the end of each fiscal year during which user fees are collected a report on the implementation of the authority for such fees during such fiscal year, and on the use the FDA made of the fees collected during such fiscal year for which the report is made. I assure you that the proposed user fee dollars in our FY 1996 budget request will be used to improve the FDA's human drug application review process.

MEDICAL DEVICE BACKLOGS

Question. Throwing more funds and staff at a problem doesn't appear to solve it. To illustrate, my understanding is that over the past three years the FDA had close to 50 percent more money and 45 additional employees devoted to device approvals. During this period, Medical Device Premarket Approval applications declined by 50 percent. Yet, over this period the FDA went from having 2 overdue premarket applications to 22.

Dr. Kessler, please explain why an increase in funding and staff and a decrease in new applications did not result in an increase in the rate of device approvals and a decrease in backlogs.

[Supporting facts: At the end of FY 1991 the FDA reported that only 2 Premarket Approval Applications for medical devices (PMAs) had been pending for more than 180 days; at the end of FY 1994, 22 PMAs had been pending in excess of 180 days. During this same period applications for PMAs declined, not increased. In FY 1990 and 1991 the FDA received 154 PMAs as opposed to 86 PMAs in FY 1993 and 1994. During the same period the number of employees devoted to Device & Radiological Product Evaluation increased from 415 FTEs in FY 1991 to 459 FTEs in FY 1993 and the budget for product evaluation increased from almost \$30 million in FY 1991 to over \$44 million in FY 1994.]

Answer. In fact, FDA significantly increased the productivity and timeliness of its premarket program. In FY 94, 5498 new products were cleared for marketing via the 510(k) process compared to 4,007 in FY 93. Moreover, median review times for 510(k)s are substantially lower than they were a year or two ago. The median time to action decreased by 45%, from a peak of over 220 days in February 1994 to approximately 120 days in December 1994. And the backlog of 510(k) submissions was reduced 75% -- from nearly 2000 in December 1993 to 460 in December 1994. These positive trends are the end result of a myriad of management enhancements, such as reducing review requirements for low-risk devices, refusal to file poor quality submissions, and reallocation of internal resources to augment product review.

Moreover, despite the high priority given to the reduction of the 510(k) backlog, in FY 94 FDA also increased the number of PMA's approved to 26, up from 24 in FY 93. These included some significant products: the first ventricular assist device to serve as a bridge to cardiac transplantation; the first contrast agent for use in ultrasound imaging of the heart for wall motion studies; the use of the Hybritech Tandem PSA Assay for prostate cancer screening; and the first stent for initial treatment of symptomatic, short, lesions in large

coronary arteries. Three PMA's approved in FY 94 represented the first approval of the device world-wide: the Cook Chorionic Villus Sampling Set indicated for use in obtaining chorionic tissue samples transcervically for the prenatal diagnosis of genetic abnormalities; Exogen's Sonic Accelerated Fracture Healing System is the first ultrasound device to accelerate the healing of new bone fractures in the lower leg and lower forearm of adults when used in conjunction with orthopedic treatments such as a cast or splint; and OrthoLogic's Noninvasive Bone Growth Stimulator indicated for treatment of old, unhealed fractures.

NEW DRUG APPLICATIONS

Question. Over the past three years, the FDA has added 215 employees (FTEs) to its approval process for New Drugs and orphan Drugs and expanded its budget in this area by almost \$53 million, from over \$52 million in 1991 to an estimated \$105 million in FY 1994 (the 1994 amount includes user fees). This increase in budget represents a 100 percent increase over these three years, yet the FDA's approval output has remained basically constant. The FDA went from 63 New Drug Application (NDA) approvals per year in 1991 to 69 in 1994. Of these NDA approvals, in 1991 the FDA approved 26 New Molecular Entities (NMEs), however, in 1994 the FDA only approved 24 NMEs. These statistics verify that simply increasing your Agency's resources hasn't solved the problem.

Dr. Kessler, how do you plan to assure this Subcommittee that we will be seeing an increase in the rate of approvals commensurate with your proposed budget requests?

Answer. FDA can influence the number of approvals, but the Agency cannot control the approval rate. The approval rate is a function of: the number of applications received; the proven safety and efficacy of the drug; the quality of the application; and the FDA review time. I do not believe the approval rate is a good indication of FDA effectiveness. A more valid indicator is the time it takes FDA to review an application. Review time is the performance indicator used for the Prescription Drug User Fee Act of 1992 (PDUFA) applications.

The resources provided to FDA through the PDUFA have contributed to several significant FDA performance accomplishments. The design of the PDUFA performance goals acknowledged that FDA should give a high initial priority to eliminating the backlog of overdue applications. The goals challenged us, within two years, to clear an overdue backlog equivalent to more than six months of normal receipts while, at the same time, readying our process to accelerate the review of new

submissions. FDA is nearing completion of this challenge. As of March 1995, the Agency had acted upon all but 2 NDAs. We expect to act on the last of nearly 700 overdue submissions months ahead of the target date of July 2, 1995.

Eliminating the overdue backlog has provided an effective proving ground for a concerted management effort to build excellence into our review processes. We are continuing investments to achieve a state of excellence where FDA's work force is focused on performance, empowered with information, enabled with technology, expressing pride in accomplishment, and solving challenging problems within a supportive team-oriented environment.

None of this quest for excellence is discretionary. The PDUFA goals require that we invest in our people, our management systems, and our technological platform if FDA is to make more than incremental changes in the way it undertakes reviews. We believe that we are on the threshold of a dramatic change in FDA's review performance.

We are not alone in our quest for excellence. Our partners in this endeavor - the pharmaceutical industry - recognizes their responsibility to make qualitative improvements in their regulatory submissions so FDA can succeed in meeting the quantitative goals of PDUFA. We see encouraging signs that, despite their growing scientific complexity, regulatory submissions consistently meet Agency requirements for completeness and rigor.

This mutual quest for excellence cannot help but show itself in FDA's performance statistics. For the submissions received in FY 93, we can now measure performance against the 6 and 12 month PDUFA review performance goals. In each and every category of submissions, FDA's performance exceeded equivalent performance in the years immediately preceding PDUFA. While this alone is heartening, FDA's performance on the FY 93 cohort has met or exceeded some of the PDUFA performance goals for future years. Overall, this timely performance by both FDA and application sponsors has resulted in a median approval time for the NDAs received in FY 93 that is more than six months faster than the pre-PDUFA experience.

While progress has been great, the design of the PDUFA goals stretch us each year to higher and higher performance. The final performance goals in FY 97 remain far above our current level of achievement. So, while we can look with justifiable satisfaction at the accomplishment of having taken action on a record number of submissions in short time frames, a concerted effort

will be necessary to boost current performance to the FY 97 levels.

OFF-LABEL USES OF APPROVED DRUGS AND DEVICES

Question. In recent years, FDA has aggressively prevented the dissemination to the medical community of information that describes new uses of approved drugs and medical devices. Certainly, FDA should prevent frivolous health claims by fly-by-night operations. But I cannot understand why the FDA is spending its resources interfering with manufacturers telling doctors about competent studies that are reported in publications such as the Journal of the American Medical Association and recognized medical texts.

Americans trust and rely upon their doctors to keep abreast of the latest research. The FDA appears to be impeding the access of doctors to this information. How much money (and FTEs) is the FDA and its lawyers spending on its campaign to restrict this information?

Answer. FDA does not have a "campaign to restrict... information" about new uses of approved drugs and devices. Pursuant to the Federal Food, Drug, and Cosmetic Act, FDA does, however, have a series of regulations and policies related to advertising and promotion, which are intended to assure the safe and effective use of FDA-regulated products.

The underlying basis for these regulations and policies is that the Act requires FDA to make a determination as to whether a product is safe and effective for its "intended use(s)." This determination is made based on the scientific evidence supplied to the agency by the manufacturer. In order to receive approval or clearance for the drug or device, the scientific evidence must support the manufacturer's "intended uses(s)."

Under the Act, drugs and devices may be labeled or promoted only for the intended use(s) that have received FDA approval or clearance. The expressions of the persons legally responsible for the labeling of the drug or device, the circumstances surrounding the distribution of the article, including labeling claims, advertising matter, or oral or written statements, can establish a new intended use for the product. Accordingly, a manufacturer must provide the agency with the scientific evidence that demonstrates the safety and effectiveness of the new use, and obtain approval or clearance of the use, prior to advertising or promoting that use.

If manufacturers were permitted to advertise or promote a product for uses that are not approved or cleared, healthcare professionals and consumers could

not be assured that the product is safe and effective for that use. In addition, allowing this unchecked practice could undermine the entire drug and device approval process, because manufacturers would have little or no incentive to perform the studies and seek approval for additional uses of approved drugs.

FDA's advertising and promotion policies establish mechanisms for manufacturers to disseminate information about their products and maintain compliance with the Act. FDA's policies only apply to activities that are performed by or on behalf of the companies that market the products. Independent scientific and educational exchange among healthcare professionals and/or scientists, are not affected by FDA's policies.

Physicians and other healthcare professionals have always received, and continue to receive, information about new uses of drugs and devices from a variety of sources, including manufacturers, professional societies, academic institutions, libraries, textbooks, and other publications.

The agency currently is re-evaluating its policies concerning the dissemination of information by manufacturers on unapproved uses of approved drugs and devices.

For your information, currently, FDA has the following number of FTEs devoted to advertising and promotion review, approval, compliance, and surveillance in each of the Centers:

<u>Center</u>	<u>FTEs</u>
Center for Drug Evaluation and Research	28
Center for Biologics Evaluation and Research	3
Center for Devices and Radiological Health	6
Center for Veterinary Medicine	1.5

NDA SUPPLEMENTS APPROVALS

Question. The FDA requires that manufacturers file NDA Efficacy Supplements before they advertise new uses of approved drugs or make other changes (such as dosage). However, the FDA has fallen behind in its processing of these applications. At the end of fiscal year 1994, the FDA had 119 pending NDA Supplements. The FDA only approved 43 NDA Supplements in fiscal year 1994, down from 54 in 1993. Dr. Kessler, why did the rate of approvals fall off and how do you plan to use your proposed dollars to increase your rate of approval?

Answer. Actually, in FY93 54 efficacy supplements were approved in a median time of 17.7 months and a mean time of 28.1 months. In FY94 there were 43 efficacy

supplements and 7 type 6 NDAs (actually efficacy supplements that are administratively handled as NDAs and for which the manufacturers only pay efficacy supplements user fees) in a combined median time of 13.2 months and mean of 16.5 months. This demonstrates that by managing to meet the user fee performance goals, we are actually seeing a significant improvement in the times to approvals for the supplements. Please note that a pending application does not necessarily mean that it is overdue.

In addition, it is noteworthy to understand that we began the management of the user fee program by focusing on speeding up our reviews of original NDAs, where we cut our review time by 21% in 1994, on meeting goals on manufacturing supplements so that new technologies could be implemented, and on eliminating our backlogs. In fact, the Agency was able to eliminate the user fee defined efficacy supplement backlog ahead of the scheduled PDUFA deadline. Now, we are focusing on speeding up our reviews of both user fee efficacy supplements and the remaining pre-user fee supplements.

When measured by the number of approvals, the rate of approvals does vary from one year to another. There are three main factors that actually determine the number of efficacy supplement approvals each year. These are the number of efficacy supplements received by the Agency, the quality of the submissions, and the safety and efficacy of the drugs involved. FDA only has control over how rapidly these efficacy supplements are reviewed, not how many are approved. It is important to note that the number of efficacy supplements received by the Agency does vary from one year to another. In FY 1990, we received only 38 submissions whereas in FY 1994 we received 76. Not surprisingly, the number of approvals also varies widely in this category. In FY 1991, we approved only 19 efficacy supplements. For these reasons, PDUFA goals are focused towards decreasing review times for that is the part of this process we do control. In doing so we believe we will be creating a review process that will allow those products with the requisite data to demonstrate safety and efficacy to be able to promote these new claims to the American people as quickly as possible, and the American people will know that the claims are indeed backed by an independent vetting and analysis of the data to support those claims.

In order for the Agency to increase the speed of the drug marketing submission (NDA) review process, the Agency must continue to receive PDUFA resources. With the PDUFA resources received so far, the Agency has made a very promising beginning in speeding up review efforts, and the Agency has met all interim performance goals referenced in the User Fee Act. The Agency is well on its way toward accomplishing the final performance goals

(FY97) referenced in the User Fee Act. Meeting the performance goals is already manifesting itself not only in shorter review times but also in shorter times to approval for those products that have the requisite data to demonstrate their quality, safety, and efficacy. Examples of that progress include the decrease of NDA approval time by 21 percent between calendar years 1993 and 1994; and eliminating the user fee defined backlog of overdue efficacy and manufacturing supplements ahead of their January 1995 deadlines. The Agency is well on its way to meeting the goal of eliminating its user fee defined original NDA backlog by the July 1995 deadline. At present only 2 applications remain.

PDUFA goals require that the Agency invest in its human resources and infrastructure to make effective, enduring changes in the way it undertakes reviews. Meeting this challenge will require, for example, that the Agency continue its recruitment effort. The specialized skills and experience required for most of the positions place FDA in many of the most highly competitive sectors of the job market. The acquisition of new employees represents a major accomplishment that is crucial to the success of the PDUFA program. Although it may be two years before a new reviewer is functioning at the full performance level, successful recruitment, along with other management changes already begun, will give the Agency the staff and process controls needed to decrease the review time of drug applications.

FDA will also use these resources to invest in its management systems. For example, in late 1993 the Center for Drug Evaluation and Research formally launched its Team-Based Project Management Program which is designed to improve the efficiency of the drug review process. The program combines management approaches to new NDA reviews and allows many review disciplines to be organized into multi-disciplinary teams early to develop and commit to a review plan with identified milestones. This is another example of a proactive management deploying resources toward timely accomplishment of the highest priority review efforts. It will give the Agency additional management tools necessary to meet PDUFA goals.

The Agency has also undertaken information systems projects designed to decrease the amount of time needed to review applications. One example is the Administrative Management of the Files, a project designed to enhance the Agency's information systems architecture. The AMF will build on systems already in place and provide more information to reviewers than is currently available. When fully implemented, it will allow reviewers to retrieve tracking information on an application and retrieve the actual document on line

which will result in increased efficiency of the review process.

However, while the Agency is using additional PDUFA resources to achieve faster approvals (driven by decreased review times), it does not necessarily follow that the number of approvals will increase. There are three main factors that actually determine the number of approvals each year. These are the number of applications received by the Agency, the quality of the submissions received, and the data in the submissions attesting to the safety and efficacy of the drugs. All of these factors are under the control of the manufacturers. FDA only has control over how rapidly these applications are reviewed. How many are approved is dependent on the quality of the data submitted. It is important to remember that the whole premise of the user fee act was to give FDA the resources to establish a review system that would assure that those drugs with the requisite data demonstrating safety and efficacy indeed were approved in a timely manner. And that those without the requisite data would be reviewed and the manufacturers notified of the deficiencies so that the manufacturer could decide if they wished to pursue the development of the product further. The goal is to establish a review process that is predictable and timely so that good drugs can get to the market as soon as possible.

FDA SLUGGISHNESS ON DRUG APPROVALS

Question. The Wall Street Journal recently reported in a January 20 article that, while many of the nation's generic drug makers thrived in the last quarter because of the growing demand for less expensive versions of brand-name medications, others continued to grapple with, and I quote, "the sluggish pace of new product approvals at the Food and Drug Administration." One analyst noted, and I quote from the article's paraphrasing of his remarks: "the FDA's continuing tightening of regulatory guidelines has meant a healthy backlog of marketing applications at the federal agency."

My question is, how do we ensure that FDA overregulation does not continue to hamper the ability of U.S. companies to offer consumers equally safe and potentially life-saving but far less costly, products in a timely manner?

Answer. The January 20, 1995, Wall Street Journal article provides a grossly inaccurate picture of the performance of FDA's generic drug review program. The backlog of marketing applications to which the article refers has been relatively steady since mid-1992. From that time through January of this year, applications pending each month have generally varied between 400 and

500. This is a reduction from the number of approximately 1200 pending applications that existed during the period of 1989 through early 1991 during the generic drug scandal. In addition, only 6 (7 percent) of the current applications have been pending more than 180 days. It should also be pointed out that the median approval time for generic drug applications has dropped from 34 months in 1992 to 24 months in 1994. Approval time includes both the time FDA spends reviewing an application as well as the time the applicant spends responding to deficiencies in the application.

The generic drug industry is made up of hundreds of firms. At any one time, some portion of the industry is more successful than others in submitting and receiving application approvals. Generally, these firms prepare sound marketing applications based on good science and sound manufacturing practices which can lead to a timely approval. Other firms are less diligent and, therefore, less successful.

Approvals of new products have been relatively steady over the past three years, averaging between 18 and 21 per month.

In addition to these achievements, the Agency has been and will be taking steps to reduce regulatory restrictions. For example, the Agency has recently delineated the responsibilities of the reviewing divisions and the field investigator staff in the drug approval process. Clarifying these responsibilities has reduced the information that was previously required to be submitted and thereby, eliminated duplicative requirements. The Agency is also moving to allow industry to implement several types of manufacturing changes without receiving prior approval from FDA. This permits industry to immediately institute changes that previously required several months to gain FDA approval.

MEDICAL DEVICES BACKLOG

Question. The Government's inefficiencies do not take a toll only on the government -- rather, they have a crippling effect on American companies and the economy in general. Nowhere is this more vividly exemplified than in the area of medical devices and the backlog of new product applications at the FDA.

To illustrate, according to a June 30, 1993 article in the New York Times, a small medical equipment company called American Biomed Inc. filed an application with the FDA to market a device that would remove cholesterol from clogged arteries. Eighteen months later, the company was still awaiting word on whether and if it could sell its product in the U.S. Like many other small companies,

American Biomed decided to move out of the U.S. This is not an isolated occurrence, unfortunately.

Dr. Kessler, increasing your budget doesn't appear to have solved this problem. What steps do you propose to take in FY 96 with your proposed dollars to ensure that an important American industry is not continued to be chased overseas?

Answer. FDA has made substantial progress in reducing application backlogs. In the 510(k) program, we decreased the backlog of pending submissions by 80% -- from 1,978 active and overdue at the end December 1993 to 371 at the end of January 1995. Moreover, in December 1994, we exempted an additional 148 categories of devices from the 510(k) requirement. This should result in manufacturers having to submit approximately 600 fewer 510(k) submissions each year. When this combined with our earlier exemption actions, the result is that nearly two-thirds of Class I devices that formerly required 510(k)'s no longer need them. Despite the high priority given to the 510(k) program, in FY 94 FDA also increased the number of PMA's approved to 26, up from 24 in FY 93. And, in FY 95, we initiated a program management pilot project in the PMA program. Project management describes a process of prospectively planning, organizing, and managing work and resources to accomplish a defined objective which has constraints of time and resources. This management tool will be expanded to the entire PMA program following validation of the software and process models in the pilot project.

With regards to manufacturers moving overseas, I am not aware of information that substantiates the contention that domestic regulatory burdens are solely or principally to blame for this movement. The factors affecting decisions by American manufacturers to relocate their businesses overseas were cited in a Congressional Research Service report of May 1992. The report indicated that lower labor costs, lower tariffs, lower transportation and construction costs, greater ease in penetrating foreign markets and tax incentives influence decisions to move operations outside the U.S. Moreover, a recent survey by the Health Industry Manufacturers Association (HIMA) shows that U.S. device manufacturers are capitalizing on an expanding world market, particularly for "high tech" products. Survey figures show that American products now account for 60% of worldwide sales, compared to 40% in 1980. Besides the desire to expand international market shares, HIMA's survey shows that American businesses have moved off-shore for a variety of reasons including higher liability risks in the U.S. and constraints on Federal reimbursement, in addition to the domestic regulatory climate.

PRODUCT APPROVALS IN OTHER COUNTRIES

Question. I am very concerned that despite the FDA's growing budget, your rate of product approval isn't in pace with other countries. In July 1994, the Minneapolis' Star Tribune published a special series titled "Losing the Edge." The series included the stories of some Americans with potentially terminal illnesses, who were forced overseas to seek out promising treatments that are not available in the United States. Incredibly, most of these treatments were developed by American researchers.

The story of Dr. Michael Werner is illustrative. Dr. Werner discovered he had a rare form of brain cancer in October of 1993. According to the Star Tribune article, in the United States "90 percent of patients with th[is] disease die within 12 months of diagnosis and 99 percent die within five years." Dr. Warner was forced to fly to Tokyo and spend \$60,000 for an experimental treatment not approved by the FDA. Dr. Warner said that the Japanese have treated 120 patients with his condition and have reported that 52 percent of the patients have survived for five years and 19 percent have lived for 16 years after treatment.

Dr. Kessler, what is the FDA doing to get up to speed with these other countries and to increase FDA efficiency in approving products? More money is obviously not the answer.

Answer. FDA remains an international leader in the fields of regulatory science and product review. As an international leader, it is the FDA to which other countries look when developing their own standards.

The Agency has high and reasonable standards for drug safety and efficacy, and data on the withdrawals of approved drugs indicates that in European nations, drugs were approved prematurely resulting in serious injury and loss of life and these products ended up having to be withdrawn from the market in those countries. We believe the data demonstrate that in the U.S., FDA standards have been far more successful in preventing this kind of situation. In addition, if one looks at the data for country of first launch of new products in the last five years, the United States is second only to Japan. Interestingly, last year, SCRIPT commented that of all the products launched in FY 1994, only two really had the potential to make a significant impact on public health. Both of these drugs were developed by U.S. pharmaceutical companies and were approved first in the United States. We believe the best way to analyze this question is not just looking at the numbers of products approved in various countries, but at the fate of products that actually offer something unique to public health.

You also asked what the Agency is doing to increase efficiency in approving products, stating that more money is obviously not the answer. However, the Agency's experience indicates otherwise. As I stated previously, the Agency has not simply obtained increased resources without results. PDUFA goals require the Agency to invest in its infrastructure in order to make effective, enduring changes in the way it undertakes drug reviews.

Because of the PDUFA resources and the fact that the Agency has met every interim goal referenced in the PDUFA, the Agency has already begun to increase its efficiency in approving products. As I stated earlier, the median approval time for all NDAs was 21% less than what it had been in FY 1993.

The Agency also made remarkable progress with regard to reducing the backlogs of overdue NDAs and supplements. As of the end of FY 1994, the Agency reduced the PDUFA-defined backlog of overdue NDAs from 35 to 5 (now at 2), of overdue efficacy supplements from 59 to 2 (now at 0), and of overdue manufacturing supplements from 532 to 8 (now at 0). In December 1994, the Agency eliminated the backlogs of both efficacy and manufacturing supplements, ahead of their January 1995 deadlines and is clearly on schedule for having the last 2 NDAs in this backlog acted upon by their July 95 deadline. The Agency will not be able to continue this pace of accelerating reviews and meet future PDUFA goals unless it receives the remaining PDUFA resources referenced in the original PDUFA.

I would like to take a moment to comment on your example -- the story of Dr. Michael Werner. Since it is public knowledge that an Investigational New Drug Application (IND) for Boron Neutron Capture (BNC) exists at Brookhaven, we can acknowledge that we consider BNC to deserve high priority as an investigational treatment for a rapidly fatal disease. When FDA and DOE (which provides grants to support this research) appeared at a Congressional hearing in May 1994, the investigations had just begun. Since then we have worked closely with the investigators to bring the reactor on line. Instead of the anticipated 6 to 12 months, this took only a few weeks. We also have worked closely with investigators in the development of ongoing clinical studies to gather safety and efficacy information expeditiously. Up until recently, the major delay in the development of BNC in the U.S. has been the lack of academic or commercial interest in the treatment because of severe safety problems that occurred years ago when this mode of therapy was tried in the United States. The renewed interest in the therapy is one the Agency has been in the forefront in facilitating.

However, your question points to another issue, which is how can we balance public health concerns with

economic considerations arising from differing international standards for drug development. FDA wants to do both: maintain our high standards for ensuring safe and effective drugs, and accelerate drug development and approval activities. We believe that drug companies still want the FDA "stamp of approval," and will be encouraged to keep their drug development activities in the U.S. as we continue making significant improvements in our process. We are just beginning to see the benefits of the additional resources from user fees. It would be premature to give up this program now.

STREAMLINING PRODUCT APPROVAL

Question. Excessive bureaucratic red tape and overregulation takes a toll not only on the U.S. budget and the efficiency of government operations, but, in the case of the FDA, on American lives. The FDA's handling of the cardiopump device is illustrative. The device, featured last summer on ABC's 20-20 news program, was approved within weeks in European countries. Austrian ambulances responding to heart attacks are required to carry the cardiopump. As ABC reported, the FDA ordered the University of Minnesota to stop its study because of difficulties obtaining informed consent from many heart attack victims even though "studies at the University of Minnesota and elsewhere found heart attack victims who were treated with this device were more likely to survive.

Dr. Kessler, what steps is your Agency taking to streamline product approval procedures in the U.S. and what can we learn from European and other countries that we can apply here?

Answer. A host of initiatives have been established to streamline the product approval process including reducing review requirements for low-risk devices, refusing to file poor quality submissions, reallocating internal resources to augment product review, and applying formal project management premarket approval applications. Comparisons between the U.S. and European approval system has been discussed in other responses.

U.S. VERSUS FOREIGN APPROVALS OF MEDICAL DEVICES

Question. A January 1993 survey by the Department of Commerce revealed 49 American-made medical devices tied up in FDA review in this country that were already approved for sale in Europe, Japan and elsewhere.

I found this to be a very distressing statistic, particularly given the amount of resources that are committed to FDA functions. What can we learn from these countries that we can apply here in the U.S. to speed up the approvals of devices that are often life-saving to

many Americans and what steps is the FDA taking in this regard?

Answer. The relative infancy of the European system makes it difficult to gauge its effectiveness, either in public health terms or in the degree of access to new products or furthermore to draw any meaningful comparisons with the U.S. regulatory system.

Approving new devices in the U.S. is more rigorous than in other countries, because U.S. device law requires that new products meet standards of both safety and effectiveness prior to marketing--a system established to provide maximum protection for U.S. patients. Nevertheless, it should be noted that some devices are approved for marketing in the U.S. first. Three PMA's approved in FY 94, for example, represented the first approval of the device world-wide: the Cook Chorionic Villus Sampling Set indicated for use in obtaining chorionic tissue samples transcervically for the prenatal diagnosis of genetic abnormalities; Exogen's Sonic Accelerated Fracture Healing System, the first ultrasound device to accelerate the healing of new bone fractures in the lower leg and lower forearm of adults when used in conjunction with orthopedic treatments such as a cast or splint; and OrthoLogic's Noninvasive Bone Growth Stimulator, indicated for treatment of old, unhealed fractures.

OVERREGULATION FORCING MANUFACTURERS OVERSEAS

Question. I am deeply concerned that excessive red-tape created by the FDA is driving medical device manufacturers and good jobs overseas.

January's American Spectator reports that "the FDA's approval process for major new medical devices has become so laborious that leading FDA specialists are regularly advising their device manufacturing clients to manufacture and sell their products only outside the U.S."

A survey conducted this summer by the Minneapolis Star Tribune found that "Minnesota firms planned to create 1,700 jobs in foreign countries during the next five years -- largely because of FDA delays in approving medical devices." A national survey-of 58 medical device manufacturers conducted by the American Electronics Association yielded similar results. Forty percent of the surveyed companies reported a decrease in the number of U.S. employees because of FDA delays, twenty-nine percent increased investment in foreign operations and twenty-two percent moved U.S. jobs overseas.

Dr. Kessler how is the FDA prepared to respond to this problem in FY 96 and, of your proposed budget

request, what amount of resources (including FTEs) do you plan to devote to addressing this issue?

Answer. A recent survey by the Health Industry Manufacturers Association shows that U.S. device manufacturers are capitalizing on an expanding world market, particularly for "high tech" products. The survey also shows that American businesses have moved off-shore for a variety of other reasons than the FDA approval process including higher liability risks in the U.S., constraints on Federal reimbursement. In a Congressional Research Service report of May 1992, lower labor costs, lower tariffs, lower transportation and construction costs, greater ease in penetrating foreign markets and tax incentives influence decisions to move operations outside the U.S.

Nevertheless, reducing application backlogs and review times--while maintaining quality in review standards--is FDA's highest priority, and FDA has already reallocated significant resources to accomplish this. Between fiscal years 1992 and 1994 FDA increased the number of full time employees assigned to new product review from 35.2 percent, or 343 employees, to 46.5 percent, or 489 employees--an increase of nearly a third in just two years.

FOSTERING A COOPERATIVE ENVIRONMENT

Question. The more an executive branch agency works hand-in-hand with private industry to address and resolve issues of public concern, the greater likelihood there is that the problem will be solved and, also, that government resources will not be unduly diverted and wasted. I am very disturbed about reports that suggest that the FDA has not adopted this approach with the industries it regulates. Rather, industry officials widely report that they fear that raising complaints of inequitable or inefficient treatment of their company by the FDA will have negative repercussions.

Dr. Kessler, what are you doing to foster a more cooperative environment with private industry?

Answer. We have a number of initiatives ongoing and more planned with regard to working with private industry. I will be happy to provide this information for the record.

[The information follows:]

Ongoing/Planned Initiatives Regarding Private Industry

1) Commissioner's Industry Exchange Meetings. Three years ago we initiated what we refer to as the Commissioner's Industry Exchange Meetings, which are designed to focus on issues of current concerns to the regulated industry. They are held with our centers, our field offices, and the regulated industry. To date, in the more than 60 meetings we have held, about 400 representatives of the regulated industry have attended, and as a result we have reached approximately 29,000 members of the regulated industry.

2) Industry and Trade Organizations. In conjunction with industry, trade, and professional organizations that represent the regulated industry, we have consistently participated in their national and international meetings on topics of current concern to the regulated industry. For example, in 1994, we worked with about 150 organizations -- many on more than one occasion -- planning and developing programs, and providing participants, as needed.

3) Dear Colleague letters. FDA has developed a means of partnering with the regulated industry through "Dear Colleague" letters, which are done to keep industry informed about changes in regulations, procedures, and policies that occur, as well as upcoming meetings of interest. Our letters have a multiplier effect on the industry in that they are used in industry newsletters, as well as mailed to the membership of trade organizations. In FY 1994, we mailed 346 information documents to 11,837 recipients.

4) Field Office Activities. Our field offices put considerable efforts into training seminars for members of industry. For example, training efforts for the pharmaceutical industry would include programs to explain requirements/expectations in areas such as bulk pharmaceutical chemicals, dosage form drugs, clinicals supplies, sterile operations, development report requirements, technology transfer issues, scale-up issues, validation concepts, cleaning validation, and laboratory GMPs. We keep industry apprised as to trends in approvals/recommended turndowns and give them specific examples of reasons for turndowns. Further, we are working with the GMP-training and education association (professional trainers) to develop modules in the form of slide shows in the following areas: executive's role in pre-approvals; research and development; bulk pharmaceutical chemicals; dosage form drugs; and laboratory issues. These modules will be available to the entire industry at minimal cost.

5) Small business activities. FDA has devoted resources toward small business throughout a number of different offices. Some of these activities include: dissemination of information about new regulatory requirements or proposals through mailings and meetings/seminars; availability of legal staff to resolve disputes between FDA and small business; offices in each center to deal specifically with small business concerns throughout the product approval process; regional outreach offices; and within the Office of Regulatory Affairs, an office to eliminate duplication of paperwork and conflicting enforcement actions.

6) Use of Technology to Improve Communications with Regulated Industry including Small Businesses. FDA has made use of technological innovations to improve communications with the industry. These include: an electronic bulletin board which contains news releases, enforcement reports, approval lists, and other information; CD-ROM access to FDA manuals and documents, by subscription; teleconferences; an electronic docket to receive and catalog comments on proposed rules is under review; and an on-line regulatory agenda with current information about the status of regulations.

7) Future Events. We are planning a series of meetings regarding a number of different issues. These include: our new regulatory reform initiatives, biotechnology issues at the request of industry, good laboratory practices, and issues of concern to the Parenteral Drug Association. We are working with the international society for Pharmaceutical Engineering to develop guides on baseline information to design and construct facilities, equipment and systems. We have taken steps to increase early consultation with the private sector in the development of regulations concerning user fee waivers and exemption rules. We have made changes in the process for receiving comments on proposed rules. FDA has utilized the task force model to develop legislative and regulatory proposals. Given these numerous examples, it seems clear that FDA has in fact tried to foster a cooperative working environment with industry wherever possible.

SURVEY RESULTS

Question. A recent survey of the American public [conducted by The Luntz Research Companies on January 5, 1995 and sponsored by Citizens For A Sound Economy] found that no fewer than two out of every three of the people polled agree that the current FDA regulatory scheme results in lost lives and higher medical costs for American consumers. Sixty-five percent of the survey's respondents disagreed with the statement that the FDA is quick and efficient. And that same percentage agreed that if a drug has been approved and tested in Europe,

proving to save lives in countries such as England, France and Germany, then the drug should be available in the U.S. "right now."

It appears that the FDA is out of sync with the - American public. It also appears that a majority of Americans think that the FDA is not doing its job well enough or fast enough to meet their public health and cost concerns.

Explain how you plan to use your proposed budget requests to reform the FDA so that it more closely responds to what the American people want, expect, and need.

Answer. Recently published opinion polls on the Food and Drug Administration show very strong support for the agency among the general public. For instance, the Luntz poll reported that 65.6 percent of the public had a "favorable" opinion of FDA and almost 80 percent of the public was "confident" of the safety of the food supply and almost 90 percent were "confident" of the safety of their prescription drugs. In addition, the poll reported that slightly more than 72 percent of the public believed the U.S. food supply is safer than that in several other countries, and 61 percent believed that drugs and medical products used here are safer than in those other countries. At the end of the poll, the "favorable" question was asked a second time, and FDA again received a very high "favorable" rating--61.4 percent. A second poll, done for the Wall Street Journal/NBC, found similar results. Almost eight in 10 respondents--78 percent--feel that FDA is either very or fairly necessary; 60 percent said it is very necessary. Support for the agency was found in every demographic group.

To maintain that level of public support, FDA is committed to using its budget requests to continue the reforms already under way, such as those instituted as a result of the Prescription Drug User Fee Act of 1992, and to implement drug and medical devices reforms announced by the President on March 16, 1995, and those that will be announced by the Clinton Administration in the coming weeks. The American people expect and rely on safe and effective drugs and medical devices, as well as a safe and wholesome food supply. The agency is committed to maintaining those standards while improving its own performance. The reforms made by the agency in recent years already provided access to important, but unapproved, therapies and are significantly reducing drug review times.

MEDICAL DEVICES BACKLOG

Question. I was very concerned when I read in a January 21st Washington Post article that FDA delays in approving medical devices are crippling companies, driving them overseas and harming patients who can't get the lifesaving or life-improving devices that are available in other countries. We have heard recently, however, that the FDA is making strides in this regard. While I am happy to hear that, I think there is a bit of "smoke and mirrors" here. As I understand it, while the FDA has reduced its backlog of notifications for medical devices that are substantially equivalent" to those already on the market, the reduction was achieved at the expense of applications for innovative medical devices.

By diverting resources away from these applications, review times which are set by law at 180 days, in fact, average more than 400 days.

Dr. Kessler, aside from simply giving your Agency more money, which we are learning is not the panacea, nor what the American people want, what measures need to be taken to bring these important devices to the American consumer in a timely fashion?

Answer. Although it is true that review times increased in the early 1990s for many reasons (including internal and external oversight, new legislative requirements and quality enhancements in the review process), this situation has changed. Today, median review times for 510(k)s are substantially lower than they were a year or two ago. The median time to action decreased by 45%, from a peak of over 220 days in February 1994 to approximately 120 days in December 1994. And the backlog of 510(k) submissions was reduced 75% -- from nearly 2000 in December 1993 to 460 in December 1994. With respect to availability of new devices, 5498 new products received marketing clearance in FY 94 compared to 4007 in FY 93.

These positive trends are the end result of a myriad of management enhancements, such as reducing review requirements for low-risk devices, refusal to file poor quality submissions and reallocation of internal resources to augment product review.

IMPORT SAFETY

Question. I am concerned by the statistic that, in fiscal year 1993, the FDA examined less than 5% of all the imports of FDA-regulated products into this country. Astoundingly, a staggering 51% of the products examined failed to meet FDA requirements.

As part of the Pesticide Monitoring Improvements Act of 1988, Congress mandated that the FDA develop a computerized system capable of collecting, summarizing and evaluating its pesticide monitoring data. In an effort to abide by this mandate, the FDA increased its efforts to create a system that would help it track imported food.

This project has been an absolute failure since its inception in 1987. A July 1994 HHS Report concluded that among other problems that have plagued the development of this computerized import control system, was a general failure of the FDA's senior management to get closely involved its development. Dr. Kessler, please describe the steps that you have taken and plan to take in FY 96 to ensure that your management team is now on top of this project.?

Answer. FDA reviews 100 percent of the shipments of FDA-regulated products offered for entry into this country, before making determinations whether a shipment is admissible. This review includes precisely the type of product, its country of origin, and its manufacturer/producer. The review considers many factors, such as whether the product could have health risk potential; has unique manufacturing requirements, such as an approved low acid canned food processing schedule; whether there is a history of non-compliance for this product or this manufacturer; whether the country of origin may be a source of suspect product; and many other factors.

If as a result of this review process there is reason to believe the shipment may contain product that fails to meet the quality, safety, efficacy or other requirements of the FD&C Act, the shipment would not be allowed to be admitted until the product is examined or tested and found to be in compliance. If it does not comply, it is refused admission.

The violative rate is expectedly high for shipments that are examined/tested when there is reason to believe they may be non-complying. That high violative rate reflects the use of our knowledge of past and potential problems to target shipments that may be violative, and often are. Additionally, some shipments not suspected of having a compliance problem are examined/tested on a purely random basis, to maintain general surveillance over imported products. It would be a mistake to extrapolate to all import shipments the high violative rate that results from our examination/testing of shipments that are targeted because of information we have that they may be violative.

It is important to understand and distinguish between automation efforts related specifically to the

Pesticide Monitoring Improvements Act and the more general automated imports systems. The Pesticide Monitoring Improvements Act (PMIA), a part of the Omnibus Trade and Competitiveness Act of 1988, became law on August 23, 1988. Provisions of the PMIA require FDA to: (1) develop new or modify existing data management systems to better track, summarize and evaluate pesticide residue monitoring data; (2) enter into cooperative agreements with foreign countries exporting food to the United States in order to obtain pesticide usage data for crops grown in those countries; and (3) develop a long term analytical methods research plan detailing FDA's proposals to improve the efficiency of pesticide residue analytical methods used in monitoring programs.

The suggestion is that FDA is seriously behind in implementing provisions of PMIA, but in fact, the major PMIA provisions dealing with analytical methods, cooperative agreements, and residue data management are proceeding well.

Reporting systems are now in place to collect all of the raw data needed to accomplish the PMIA data management provisions. Computer programs to generate comprehensive annual summaries are fully operational. The data summaries for FY 1992 and FY 1993 were made available to the public via files for use on personal computers. FDA has also shared its expertise in pesticide data management with USDA's Agricultural Marketing Service to assist that agency with implementation of its residue monitoring program and FDA is also leading the effort to design a National Pesticide Residue Database to contain data from federal, state and industry monitoring.

In addition, FDA has implemented the analytical methods research provisions of the PMIA and is actively working with many foreign governments to acquire pesticide usage data and to otherwise ensure that foods imported into the U.S. comply with U.S. pesticide regulations.

The automated system for processing imports, called ISIS, that FDA began developing in 1987 has taken longer than FDA would have preferred, and experienced developmental problems we would like to have avoided. These problems were fully identified to top management in a self assessment conducted under the leadership of HHS, that began in late 1993. Based on the assessment report, FDA put further development of ISIS on hold, pending an in-depth management review that is currently underway.

In the Fall of 1993, FDA top management focused on the need to put in place nationwide an interim automated import system, and committed, in conjunction with the Customs Service, to implement an Electronic Entry

Processing System (EEPS). That interim system is now in place nationwide at 18 ports and is working very well. In February 1995, 67 percent of all shipments processed through the EEPS system received final clearance in minutes. The importance of having a complete, fully functional, trouble-free, automated import processing system for handling all import transactions is now one of the top priorities of FDA. Senior management has been very closely involved with this effort for the past year and a half. When the on-going in-depth review is completed in June, we will determine how we will proceed to complete the development of the ISIS system in order to roll it out nationwide in FY 1996. One pilot installation of the ISIS system is currently in operation in the Seattle district, having been implemented in October 1992. It continues to function well, providing capability to track and respond to the examination and sample testing of those import shipments not cleared through EEPS.

The integration of ISIS and EEPS constitutes the Agency's overall Operational and Administrative System for Import Support (OASIS).

USE OF OUTSIDE EXPERTS

Question. If we're to reduce our bloated bureaucracy, we need not only spending cuts and greater efficiency in government operations, we also need management innovations. I understand that in some European countries outside experts are used to conduct at least preliminary reviews of drug and medical device applications. And, a large number of drugs and devices receive approval in other countries significantly faster than they do in the U.S. Has the FDA evaluated the relative efficiency and cost of its product review process in comparison to that of other countries? If yes, briefly explain here today your findings and provide the Subcommittee with any documentation thereof. If no, why hasn't the FDA undertaken such an analysis and will it agree to commit some of the dollars it requests here today for such purposes?

Answer. FDA has not evaluated the relative efficiency or cost of its product review process in comparison to those of other countries because (1) essential regulatory data such as application receipt dates and negative regulatory opinions are not disclosed by most foreign regulatory organizations, (2) foreign systems have many non-comparable features such as differing patient consent and conflict of interest requirements, consideration of efficacy within separate pricing reviews, and differing requirements for post-market monitoring and renewal intervals for marketing licenses, and (3) the regulatory apparatus of FDA's

counterparts in the European Union have been in the process of intensive change.

Studies by independent researchers have provided the most insightful comparisons of regulatory performance on the same product among different regulatory bodies. E.A. Pieterse published a comparison of regulatory approval times for 70 new drugs approved in Australia, Canada, Sweden, the United Kingdom, and the United States between 1985-89 (J Clin Pharmacol 1992;32:889-896). C. Harvey, C.E. Lumley and S.R. Walker compared the regulatory review process for a cohort of 11 new drugs approved since 1986 in France, Germany, the United Kingdom, and the United States (J Pharm Med 1993 3, 65-75). Both of these studies compare review times and the frequency and nature of additional data requests by regulatory officials.

The current regulatory restructuring in Europe will affect the future efficiency and cost of European product reviews. Within the past year, the German Medicines Institute has been transformed into the Federal Institute for pharmaceutical and medical products, the Italian Health Ministry has reorganized its drugs division, the new French Medicines Agency began operations, the Nordic countries revised their regulatory legislation to conform with EC Directives, Belgium was completing design of a new regulatory agency, Sweden's Medical Products Act came into force, and Eastern European nations have continued to design new regulatory structures. Most of these changes reflect efforts by the EU member states to prepare for an new registration system in 1995 and the new European Medicines Evaluation Agency which commenced operations in January, 1995. The division of regulatory responsibilities between this new centralized authority and regulatory authorities in member states has not been finalized. Consequently, the costs as well as the efficiency of the new system are difficult to measure at this time.

HARMONIZATION

Question. The FDA has testified that it is taking steps to "level the playing field" by harmonizing U.S. and foreign regulatory requirements" in the device approval process. Briefly describe the steps that the FDA has taken in this regard and the resulting efficiencies and cost-savings, if any.

Answer. The Global Harmonization Task Force, which consists of representatives from the U.S., Canada, the European Union (EU), Australia and Japan, was formed to facilitate the alignment of the various technical requirements for a quality systems approach in regulating medical devices. While the task force is currently working on aligning quality system requirements, the objectives of the task force can be expanded to include

harmonization of other aspects of the medical device regulatory process. Dr. Bruce Burlington, Director of FDA's Center for Devices and Radiological Health (CDRH), serves as the representative to the main task force. Other experts from CDRH serve on the study groups. I will be happy to provide the details for the record.

[The information follows:]

Detailed Information on Harmonization

- Study Group 1 - This study group will do a comparison of different medical device regulations to identify areas of harmonization. The first meeting was held in December 1994.
- Study Group 2/Study Group 3 - This study group examined harmonization of quality systems in conjunction with ISO 9000. The group has finalized the guidance and it was presented at the meeting of the ISO committee on General Aspects of Medical Devices (TC 210).
- Study Group 4 - This group is developing guidelines for harmonizing auditing practices. The group held two meetings, June 1994 and January 1995, and is preparing the document "Guidelines for Auditing Quality Systems of Medical Device Manufacturers."

European Union/FDA Mutual Recognition Agreement (MRA) Negotiations.

FDA has been involved in MRA discussions with the EU which are being led by the U.S. Trade Representative's Office and the Department of Commerce. The purpose of these negotiations is to facilitate respective market access while working within existing EU and U.S. regulatory frameworks. Both the U.S. and the EU have agreed to limit the scope of devices that would be covered by an agreement. Further discussions need to be held to determine if any products have an experience base and well-defined criteria so that FDA premarket reviews can be conducted by third parties and EU conformity assessment procedures can be conducted by parties in the U.S. In order to develop recommendations on how this can be accomplished, FDA and the EU have planned a series of meetings. The purpose of these meetings will be to build FDA's confidence in the EU's capacity to adequately regulate medical devices. They will also allow an exchange of information on the implementation of the regulatory process in each country.

Exchange of Letters (EOLs) with Japan

After approximately one year of negotiations with Japan, FDA sent signed copies of an Exchange of Letters (EOL) to the Japanese Ministry of Health and Welfare (MHW) on February 3, 1994, asking for their signature and approval. The EOLs cover the mutual exchange of medical

device good manufacturing practices (GMP), inspectional information and the conduct of joint GMP inspections of medical device manufacturers in Japan and the United States.

The EOLs will act as the initial step toward a possible future Memorandum of Understanding (MOU) covering the mutual recognition of GMP medical device inspections between the FDA and MHW. Such an MOU with the MHW would be advantageous to the FDA and the U.S. medical device industry. Presently, there are over one hundred Japanese manufacturers who export medical devices to the U.S., and each year FDA conducts approximately 40 GMP inspections in Japan. With the establishment of an MOU, the need for these inspections could be reduced or eliminated, resulting in both cost savings to the FDA and more complete inspection coverage of the Japanese exporting manufacturers.

Exchange of Letters (EOLs) with Australia

On February 17, 1993, an Exchange of Letters (EOL) was established between the FDA and the Australian Therapeutic Goods Administration, Therapeutic Devices Branch (TGA/TDB).

These EOLs concern the mutual exchange of good manufacturing inspection information (GMP) and the conduct of joint inspections of medical device manufacturers in the U.S. and Australia. This accord has allowed for opportunities to compare inspection information and a basis for the development of future common administrative practices that would enable the mutual recognition of GMP inspectional findings.

Also, there has been a personnel exchange of medical device reviewers for a four-month period, February through May 1995, between CDRH and TDB. This exchange will give both organizations a first-hand look at each other's review procedures for the purpose of streamlining and harmonizing device review procedures.

RESOURCES SPENT FOR TOBACCO

Question. The Subcommittee is concerned that despite still much needed improvements in the approval processes for drugs and devices and the need for all agencies to tighten their belts, the FDA still seeks to expand its regulatory reach.

The FDA's inquiry into tobacco products appeared to take up a lot of your and the Agency's time last year. Therefore, please tell us the amount of the resources (dollars and FTEs) that the FDA has thus far devoted to exploring the regulation of tobacco products, including the time spent on public, media and legislative relations the use of the offices of the Commissioner and Policy for

this purpose, monies paid to consultants, the use of detailees from other agencies and the resources contributed from other agencies, including other operational divisions within HHS. If you can't provide this information today, we would ask that you submit it for the record.

Answer. A small, varying group of Agency employees, including two detailees from other agencies, have participated in the agency's ongoing investigation and review of nicotine-containing tobacco products. All Agency staff working on this project, have done so on top of current responsibilities and duties. As a result, while it is not possible to reliably calculate a specific cost of the investigation, it would be relatively small. Out of an Agency of about 10,000, only a few dozen individuals have been involved in the investigation.

The Agency has used the outside expertise of its advisory committee members. We have also utilized part-time assistance in basic information retrieval and review of scientific literature. Technically, none of these individuals are consultants; they are either special government employees or regular employees. We have retained no media consultants in connection with this investigation.

Question: What is your projected budget for this matter for FY 96?

Answer: FDA has no projected budget for FY 1996.

SENSORY ANALYSIS OF TUNA

Question. You have testified that your agency lacks the resources to do some of its very important work. Yet, I understand that FDA has employed several sniffing experts to smell canned tuna. Over the past few years, I am told that they have held up hundreds of shipments of tuna for aesthetic issues. Objective histamine testing has shown that those shipments, including those that were condemned, were not even close to your health and safety benchmark. Will you reexamine use of this subjective test for aesthetic purposes and report back to the Committee by June 1? Please be precise in any discussion of "decomposition" so that there is not confusion between issues of "aesthetic" and "health and safety".

Answer. FDA has a mandate under the FD&C Act to prohibit the introduction or delivery for introduction into interstate commerce of any food that is adulterated. This includes not just food considered hazardous, but also food considered unfit for human consumption.

Adulterated foods, by definition may (1) contain any poisonous or deleterious substance which may render it injurious to health, (2) consist in whole or in part any filthy, putrid, or decomposed substance, or is otherwise

unfit for food, (3) has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or where it may have been rendered injurious to health.

Often times, there is a gray area between what is unfit for human consumption and what constitutes a hazard to health situation. With continued research and data gathering this fuzzy area becomes more definitive. Sensory analysis of seafood for decomposition is an index for spoilage. Spoilage is the next step to a hazard to health situation. In the spirit of the Act this is not an issue of aesthetics, but one where the product is unfit for human consumption. If the U.S. chooses not to monitor for decomposed food, we will become the dumping ground for inferior seafood from other countries and the chances of encountering a hazard to health situation will increase, particularly scombroid poisoning.

Decomposition of seafood products, be they canned tuna or others, indicates that there has been abuse in the handling and/or storage of the food.

Histamine is a chemical compound found in nature which dilates and increases permeability of blood vessels, and plays a major role in allergic reactions. Safe levels of histamine in seafood are difficult to establish because the potential hazards to consumers are not easily predicted due to varying individual sensitivity to this compound.

Decomposition may be manifested by abnormal odors, taste, texture, color, physical breakdown of tissue, or other changes in appearance. Histamine and other compounds such as cadaverine cause consumer illness after consumption of various seafood, often spoiled fish such as amberjack, yellowtail, anchovies, bluefish, bonito, herring mackerel, tuna, mahi mahi, snapper, etc.

QUESTIONS SUBMITTED BY SENATOR HARKIN

FTEs

Question. Please provide the number of FTEs for the years 1993, 1994 and the expected number for 1995 for each of the following Centers: the Center for Biologics Evaluation and Research (CBER), the Center for Drug Evaluation and Research (CDER), and the Center for Devices and Radiological Health (CDRH).

Answer. The FTEs for each of the requested activities follows:

	<u>FY 1993</u> <u>Actual</u>	<u>FY 1994</u> <u>Actual</u>	<u>FY 1995</u> <u>Estimate</u>
CDER	1,401	1,475	1,610
CBER	700	806	870
CDRH	985	1,058	1,116

FTEs FOR ENFORCEMENT ACTIVITIES

Question. How many FTEs have the Centers and the Commissioner's Office devoted to enforcement activities in each of those years?

Answer. While the Agency does not have a specific cost coding for enforcement, we can provide estimates for each of these years for direct compliance program activities for CDER, CBER, and CDRH. The Office of the Commissioner and administrative management overhead is not included but may be calculated at approximately 11.5 percent for each of the requested years.

	<u>1993</u>	<u>1994</u>	<u>1995</u>
CDER	200	199	198
CBER	63	63	60
CDRH	305	310	338

RESEARCH-RELATED ACTIVITIES

Question. Please specify, for CBER, CDER, and CDRH, how much money is spent on research-related activities.

Answer. The amount of money spent on research-related activities for CDER, CBER, and CDRH follows:

Amount Spent on Research-Related Activities

	<u>1993</u>	<u>1994</u>	<u>1995</u>
Total \$000s			
CDER	4,382	4,797	6,714
CBER	22,937	34,944	37,069
CDRH	11,204	16,184	17,281

Question. What is the purpose of the research conducted by FDA?

Answer. FDA is a science-based regulatory agency. The knowledge and capabilities of its scientific staff are integral to product review, surveillance and compliance, problem analysis, consumer education, and other responsibilities. In addition to the direct use of FDA research results, such work enables FDA scientists to maintain the in-depth expertise necessary to make appropriate regulatory decisions.

Science underpins FDA's regulatory activities. FDA scientists directly support regulatory decisions by: assessing risks associated with FDA-regulated products, setting standards for products, testing products against those standards, improving the usefulness and precision of risk assessment methods, and developing methods to increase the accuracy of sample analysis and detection of chemicals and biological substances. FDA is dependent on science to: provide a sound scientific basis for regulatory decisions, permit its scientists to stay current with advancing science and technology, expedite product development, and facilitate technology transfer.

Question. How many FTEs are involved in performing research for each of the three Centers?

Answer. Following are the estimated FTEs involved in performing research related activities for CDER, CBER, CDRH:

FTEs Performing Research Activities

	<u>1993</u>	<u>1994</u>	<u>1995</u>
CDER	74	74	69
CBER	241	261	272
CDRH	120	111	111

Question. What is the FTE staffing cost of the research that is being performed in each Center?

Answer. In 1994, the average per person cost for salaries and benefits was \$59,434.

PRODUCT BACKLOGS

Question. What is the backlog of unapproved products in CBER, CDER, and CDRH?

Answer. I will be happy to provide this information for the record.

[The information follows:]

Center for Biologics Evaluation and Research

CBER did not have statutory or regulatory requirements for an action-due date prior to the enactment of the Prescription Drug User Fee Act of 1992 (PDUFA). However, if the PDUFA defined action-due date of 12 months for product license applications (PLAs) is applied to all CBER PLAs that are currently pending, then as of February 28, 1995, CBER has 16 pre-PDUFA PLAs and 19 post-PDUFA PLAs overdue, for a total of 37 overdue PLAs. For the pre-PDUFA overdue PLAs, there are 4 Blood Bank, 7 in-vitro diagnostic, 3 therapeutic, 1 vaccine and 1 allergenic PLAs. For the post-PDUFA PLAs, there are 16 Blood Bank and 3 in-vitro diagnostic PLAs.

Center for Drug Evaluation and Research

As of February 28, 1995, CDER had 15 Pre-User Fee NDA's overdue (regulatory clock) and 18 Post-User Fee NDA's overdue (user fee clock) for a total overdue of 33 NDA's. CDER also had as of January 31, 1995, 33 Original ANDA's overdue (over 180 days).

Center for Devices and Radiological Health

The backlog of unapproved products in CDRH is defined as the number of 510(k)s that have been under review for over 90 days in the current review cycle and the number of PMAs that have been under review for over 180 days in the current review cycle.

The number of backlogged 510(k)s dropped significantly in FY 1994--from 1,894 at the end of FY 1993 to 460 by the end of FY 1994. For PMAs, the application backlog dropped from 45 at the end of FY 1993 to 22 by the end of FY 1994.

Question. What was the average time for product approval in each Center?

Answer. I will be happy to provide this information for the record.

The information follows:

Center for Biologics Evaluation and Research

The average time from receipt to approval for product license applications (PLAs) approved during calendar year 1994 was 18.8 months for non-Blood Bank/non-Source Plasma products and 14.4 months for Blood Bank/Source Plasma products, with a total average approval time of 16.1 months for all product application types.

Center for Drug Evaluation and Research

The average approval time for NDAs in calendar year 1994 was 25.5 months. The average approval time for ANDA's in calendar year 1994 was 30.3 months.

Center for Devices and Radiological Health

The total average elapsed time for product approval in CDRH in FY 1994 was 823 days for Premarket Approval applications (PMA) and the total average time for products cleared by a 510(k) submission was 216 days.

Total average elapsed time for PMAs includes all increments of time a PMA was under review, including all of the increments of time it was under review by FDA and all increments of time it was on hold awaiting receipt of additional information from the applicant. Thus, average elapsed time, unlike average review time, includes all increments of time that transpired from the filing date until approval."

Total average review time for 510(k)s includes all time from receipt to final decision, and it includes time while a submission is on hold pending receipt of additional information.

Question. What is needed for the Agency to increase the speed and number of approvals?

Answer. I will be happy to provide this information for the record.

[The information follows:]

Center for Biologics Evaluation and Research

In order for the Center for Biologics Evaluation and Research (CBER) to increase the speed with which it reviews applications the Center must continue to receive Prescription Drug User Fee Act of 1992 (PDUFA) resources. With the PDUFA resources received so far, the CBER has made significant improvements in its review process, and the Center has met or exceeded all the interim performance goals. The Center is well on its way toward accomplishing the final PDUFA performance goals set for Fiscal Year 1997. Meeting the performance goals is already manifesting itself not only in shorter review times, but also in shorter approval times for those products that have the requisite data to demonstrate their quality, safety and efficacy. Examples of that progress include the reduction in approval time to 12.2 months for PDUFA-related biologic products; and, the elimination of the PDUFA-defined backlog.

The PDUFA goals require the Center to invest in its human resources and infrastructure to make effective, enduring changes in the way it undertakes reviews.

Meeting this challenge will require that the Center continue its recruitment effort. The specialized skills and experience required for most of the scientific positions place CBER in many of the most highly competitive sectors of the job market. The acquisition of new employees represents a major accomplishment that is crucial to the success of the PDUFA program. Although it may be some time before a new reviewer is fully functional, successful recruitment, along with other management changes and training already begun, will give the Center the staff and process controls needed to decrease the review time of biological product applications.

CBER has developed and implemented the managed review process for reviewing applications for biological products. The system establishes specific time frames with interim milestones for the evaluation of both establishment and product license applications. Milestones include dates set for administrative processing of an application, assignment of review committee members, and the 45/60 day filing meeting. The Center emphasizes good science and coordination of ancillary activities, such as bioresearch monitoring, advisory committee reviews, inter- and intra-center consultations, and pre-licensing inspections. The Center has also undertaken information systems projects designed to decrease the amount of time needed to review applications.

While CBER is using additional PDUFA resources to achieve faster approvals (driven by decreased review times), it does not necessarily follow that the number of approvals will increase. There are a number of factors that determine the number of approvals. The number of approvals is influenced by: the number of applications received; the quality of the submissions received; and data in the submissions attesting to the safety and efficacy of the drugs. All of these factors are under the manufacturer's control. FDA only has control over how rapidly these applications are reviewed. How many are approved is dependent on the quality of the data submitted. It is important to remember that the whole premise of the PDUFA was to give FDA the resources to establish a review system that would assure that those drugs with the requisite data demonstrating safety and efficacy indeed were approved in a timely manner. And that those without the requisite data would be reviewed and the manufacturers notified of the deficiencies so that the manufacturer could decide if they wished to pursue the development of the product further. The goal is to establish a review process that is predictable and timely so that good drugs can get to the market as soon as possible.

Center for Drug Evaluation and Research

In order for the Agency to increase the speed of the drug marketing submission (NDA) review process, the Agency must continue to receive PDUFA resources. With the PDUFA resources received so far, the Agency has made a very promising beginning in speeding up review efforts, and the Agency has met all interim performance goals referenced in the User Fee Act. The Agency is well on its way toward accomplishing the final performance goals (FY97) referenced in the User Fee Act. Meeting the performance goals is already manifesting itself not only in shorter review times but also in shorter times to approval for those products that have the requisite data to demonstrate their quality, safety, and efficacy. Examples of that progress include the decrease of NDA approval time by 21 percent between calendar years 1993 and 1994; and eliminating the user fee defined backlog of overdue efficacy and manufacturing supplements ahead of their January 1995 deadlines. The Agency is well on its way to meeting the goal of eliminating its user fee defined original NDA backlog by the July 1995 deadline. At present only 2 applications remain.

PDUFA goals require that the Agency invest in its human resources and infrastructure to make effective, enduring changes in the way it undertakes reviews. Meeting this challenge will require, for example, that the Agency continue its recruitment effort. The specialized skills and experience required for most of the positions place FDA in many of the most highly competitive sectors of the job market. The acquisition of new employees represents a major accomplishment that is crucial to the success of the PDUFA program. Although it may be two years before a new reviewer is functioning at the full performance level, successful recruitment, along with other management changes already begun, will give the Agency the staff and process controls needed to decrease the review time of drug applications.

FDA will also use these resources to invest in its management systems. For example, in late 1993 the Center for Drug Evaluation and Research formally launched its Team-Based Project Management Program which is designed to improve the efficiency of the drug review process. The program combines management approaches to new NDA reviews and allows many review disciplines to be organized into multi-disciplinary teams early to develop and commit to a review plan with identified milestones. This is another example of a proactive management deploying resources toward timely accomplishment of the highest priority review efforts. It will give the Agency additional management tools necessary to meet PDUFA goals.

The Agency has also undertaken information systems projects designed to decrease the amount of time needed to review applications. One example is the

Administrative Management of the Files, a project designed to enhance the Agency's information systems architecture. The AMF will build on systems already in place and provide more information to reviewers than is currently available. When fully implemented, it will allow reviewers to retrieve tracking information on an application and retrieve the actual document on line which will result in increased efficiency of the review process.

However, while the Agency is using additional PDUFA resources to achieve faster approvals (driven by decreased review times), it does not necessarily follow that the number of approvals will increase. There are three main factors that actually determine the number of approvals each year. These are the number of applications received by the Agency, the quality of the submissions received, and the data in the submissions attesting to the safety and efficacy of the drugs. All of these factors are under the control of the manufacturers. FDA only has control over how rapidly these applications are reviewed. How many are approved is dependent on the quality of the data submitted. It is important to remember that the whole premise of the user fee act was to give FDA the resources to establish a review system that would assure that those drugs with the requisite data demonstrating safety and efficacy indeed were approved in a timely manner. And that those without the requisite data would be reviewed and the manufacturers notified of the deficiencies so that the manufacturer could decide if they wished to pursue the development of the product further. The goal is to establish a review process that is predictable and timely so that good drugs can get to the market as soon as possible.

Center for Devices and Radiological Health

The Agency has taken many steps over the last two years to improve its review efficiency, including management initiatives to improve the quality and timeliness of the review process. FDA also added significant resources to the 510(k) and PMA programs in FY 1994 to increase output and reduce the number of pending applications. This resulted in a 15 percent reduction in pending 510(k)s and a 7 percent reduction in pending PMAs. To further improve the quality and timeliness of the medical device review process, FDA has proposed the medical device user fee initiative, a multi-year enhancement effort which, if passed by Congress, could begin in FY 1996. The additional user fee funding will enable FDA to add 109 FTEs which will virtually eliminate the product review backlog for all types of applications within the first 24 months of the program and accelerate time frames for product review. These steps will speed the review process leading to a higher number of approvals occurring in a given time period.

PRODUCT APPROVALS

Question. How many products were approved in 1991, 1992, 1993, and 1994 in each Center?

Answer. I will be happy to provide this information for the record.

[The information follows:]

Center for Biologics Evaluation and Research

The number of Biologic products (PLAs) approved in those years were:

<u>Fiscal Year</u>	<u>Products Approved</u>
1991	60
1992	41
1993	31
1994	24

Center for Drug Evaluation and Research

	<u>CY 91</u>	<u>CY 92</u>	<u>CY 93</u>	<u>CY 94</u>
NDAs	63	86	83	62
NDA Efficacy Supplements	19	53	54	43
ANDAs	141	239	215	255
ANDA Supplements	3413	3470	2635	2486

Center for Devices and Radiological Health

In CDRH, "new" products are approved by submission of a "Premarket Approval Application (PMA); other products, are cleared for marketing by submission of a 510(k) application and are either determined to be "substantially equivalent" or "not substantially equivalent" to a product already on the market. The following chart shows products approved or cleared in each category.

Products Approved/Cleared in CDRH

	<u>PMA</u>	<u>510(k)</u>
FY 1991	27	4,294
FY 1992	12	3,776
FY 1993	24	4,007
FY 1994	26	5,498

QUESTIONS SUBMITTED BY SENATOR JOHNSTON

VIBRIO VULNIFICUS IN RAW MOLLUSCAN SHELLFISH

Question. In a July 1994 Options Paper prepared by the Division of Special Programs, Office of Seafood, the Food and Drug Administration recommended that the Interstate Shellfish Sanitation Conference (ISSC) adopt the following to deal with the health problems associated with *Vibrio vulnificus* in raw molluscan shellfish:

Option #2: Limit harvest of oysters from the affected states during the period April through October to only those that are tagged (at time of harvest) for shucking by a certified dealer. Oysters so identified must be shucked and packed into containers that are clearly labeled, "This product should be fully cooked and not consumed raw. "

In its 1994 meeting in Tacoma, Washington the ISSC rejected FDA's "option #2" in favor of pursuing a large-scale campaign to educate those consumers who are at-risk from *Vibrio Vulnificus*. In addition, ISSC proposed to look more closely at raw molluscan shellfish harvesting and handling practices specifically in the areas of time/temperature controls and shelf-life limits.

In response to FDA's proposal, Congress included the following language in the Conference Report to the Appropriations bill for the Departments of Commerce, Justice, and State, the Judiciary, and related agencies for fiscal year 1995:

The Conferees are aware of public health concerns related to the consumption of raw molluscan shellfish by at-risk consumers, and believe that a comprehensive education program is the appropriate response to the problems of at-risk consumers. The Conferees are aware that NMFS has identified \$500,000 in Saltonstall-Kennedy funds (made available in previous years) which may be used for these purposes. The Conferees support the use of these funds for a multi-year program, that includes industry participation, to educate at-risk consumers and the medical community regarding the public health concerns related to the consumption of raw molluscan shellfish.

What is the status of the education program advocated by Congress in the FY 1995 Commerce Appropriations Conference Report?

Answer. The Saltonstall-Kennedy grant has made available, through the National Marine Fisheries Service (NMFS), \$500,000 for education.

The Agency is completing the administrative tasks necessary to put in place an Inter-Agency Agreement with NMFS to transfer \$250,000 during FY 95 to be used for a Vibrio vulnificus education campaign to inform consumers and health professionals about the health risk posed by V. vulnificus.

Question. Does this program include targeted outreach efforts to educate at-risk populations?

Answer. Raw oyster eaters who are in the at-risk populations (such as those with liver and blood disorders, gastric and immune deficiencies, etc.) are the primary target for the information.

The education campaign will include providing funds to seed development of new extension programs or enhance ongoing extension programs that would incorporate V. vulnificus education.

Question. Have any local or state officials been involved in any such effort?

Answer. As part of the campaign, FDA will offer small grants or matching funds to states, universities and the industry to fund additional educational efforts.

FDA has participated in the Interstate Shellfish Sanitation Conference (ISSC), serving on a number of committees, including the V. vulnificus Education Subcommittee. ISSC is heavily comprised of state and local officials. ISSC's input has been solicited through public comment processes. FDA continues to keep state and local officials informed and will seek to work in concert with such officials in order to carry out the educational campaign in the most efficient manner.

Question. How much funding has the FDA spent on consumer education on Vibrio vulnificus in the ten years prior to the Congressional directive to transfer \$500,000 from the NMFS to the FDA for an education campaign? and; (B) with regard to this \$500,000 which was available to be transferred from NMFS to the FDA in October 1994?

Answer. In the past ten years (1984-1995) FDA has expended approximately \$971,000 on V. vulnificus educational outreach.

This estimate is based on expenses and full-time-equivalents (FTEs) required for performing the efforts detailed in "Past Educational Efforts by FDA on Vibrio vulnificus." This does not include costs for either of two V. vulnificus workshops, nor for scientific research.

FDA is intensifying and refocusing our educational campaign using the Saltonstall-Kennedy funds. One

critical element of the campaign will be to measure the effectiveness of messages, materials, and channels to continually develop the most appropriate approach.

To date, we have presented the plan to the FDA Food Advisory Committee and industry and consumer representatives attending that meeting on February 22, 1995. We are now forming focus groups for message testing and developing draft materials. I will be happy to provide a copy of the Model Education Campaign for the record.

[The information follows:]

Vibrio Vulnificus Model Education Campaign

Background: Through money given to FDA by the National Marine Fisheries Service, we plan to develop and implement an active educational campaign, with the ability to reach beyond disseminating information.

Goal: To minimize the number of illnesses and deaths caused by Vibrio vulnificus infections associated with the consumption of raw oysters.

Objectives: To increase the number of people, especially those at risk, who:

- 1) understand (or comprehend) the message, and
- 2) say they would not eat raw oysters

Message: Through an advertising approach to education, we will attempt to capture attention and invoke interest/curiosity to read details. A **slogan** should provide the opportunity for the message to catch on.

The campaign focuses on changing behavior of those at risk from consumption of raw to cooked products. This will:

- 1) make the message positive,
- 2) give people an alternative, and
- 3) let them know that cooked oysters are safe for them to eat.

To put our message into practice, alternatives must be offered at retail, e.g., if raw oysters are offered as appetizers, acceptable cooked alternatives must be offered as appetizers.

1995 Targets: Raw oyster eaters who are alcoholics, or have liver disease, and health professionals.

1996 Targets: Raw oyster eaters in all at-risk populations (conditions involving an impaired immune system, such as diabetes, achlorhydria, AIDS, etc.) and older adults.

Tactics: (detailed information is available on each subject)

- 1) Simplified brochure
- 2) Advertising vehicles with slogan
- 3) Television public service announcement (PSA)
- 4) Radio public service announcement
- 5) Wire service for newspaper columns
- 6) Health professional journal articles and newsletters
- 7) Speeches at health professional conferences
- 8) Exhibits at health professional conferences
- 9) Extension
- 10) Grants/matching funds
- 11) Recipe alternatives

Program Evaluation: The effectiveness of the campaign will be measured.

VIBRIO VULNIFICUS

Question. What level of funding would be necessary to implement a multi-year program to reach a significant percentage of consumers susceptible to Vibrio illness?

Answer. The answer to this question will depend on the measured effectiveness of the first year of the campaign. Funding for the first year includes some components which would not be needed in subsequent years: development, effectiveness testing and cost of initial production. These components of the Model Education Campaign amount to approximately \$150,000, so the amount needed to sustain the effort would be approximately \$350,000.

Question. It my understanding that the stated objective included in the FDA's proposal for an education campaign is "to increase the number of people . . . (especially those at risk), who . . . say they would not eat raw oysters." Will the FDA measure the success of its education program for at-risk consumers by the amount of influence it will have over those citizens, or rather by its effectiveness in allowing those consumers to make their own informed decisions?

Answer: The objectives of the educational campaign are to increase the number of people within a focus group, especially those at risk, who understand the message, and say they would not eat raw shellfish. The dual objective allows us to measure effectiveness at both levels of success. We recognize that a portion of the population will be unreachable in that they will not be influenced to change even though they have the information.

FDA and several states have continually provided information and education to those "at-risk" people about the risk of eating raw shellfish. However, despite these education efforts, many of those in the at-risk category do not know they are at risk. For example, many people

do not know they have hemochromatosis or liver disease. Alcoholics may deny that they are alcoholics, and therefore not identify with label, menu, or other point-of-sale warnings, or information provided through physicians, specific illness associations, or public announcements.

It is the Agency's mission to protect the public health and this includes both healthy and "at-risk" populations. The Agency does not wish nor does it intend to dictate to consumers what foods they will or will not consume. However, the Agency is responsible for educating consumers, taking necessary steps to insure the consumers are protected from all public health hazards, and ensuring that information is not misleading or unclear to the consumer.

Question: Is FDA taking or planing to take any regulatory action to control the impact on public health of *Vibrio Vulnificus* outside the scope of the recommended educational program? If so, please provide for the record a detailed summary of any such proposals or actions.

Answer: In August 1994, the Agency recommended marketing restrictions to the Interstate Shellfish Sanitation Conference (ISSC), to control *V. vulnificus* illnesses. These recommendations were:

Do not sell in-shell oysters harvested from the Gulf of Mexico and its tributaries from April 1 to October 31 for raw consumption.

If harvested during this period, require that oysters be shucked by a certified dealer and labelled to indicate that the product is for cooking and should not be consumed raw.

The ISSC postponed immediate action on this recommendation and established a Consumer Protection Committee to develop language for the National Shellfish Sanitation Program (NSSP) Manual of Operations (MOP) for later consideration, including public health protection alternatives comparable to the FDA recommendation. The ISSC will consider wording changes for the FDA recommendation, and for proposed alternatives during their next meeting in August 1995.

FDA is pursuing efforts to better educate and inform consumers of the *V. vulnificus* problem.

The Agency will continue research to identify specific controls for *V. vulnificus*. We will review the time/temperature measures proposed by the ISSC Consumer Protection Committee and discuss those recommendations with the ISSC.

FDA has, at this time, made no decision to pursue a regulation to restrict marketing of Gulf Coast oysters. However, we are concerned that *V. vulnificus* remains a public health problem for which there is no simple answer.

SUBCOMMITTEE RECESS

Senator COCHRAN. Our next hearing is going to be March 8 in this same room at 10 a.m. In the meantime, the subcommittee stands in recess.

[Whereupon, at 11:42 a.m., Wednesday, March 1, the subcommittee was recessed, to reconvene at 10:04 a.m., Wednesday, March 8.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

WEDNESDAY, MARCH 8, 1995

**U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, DC.***

The subcommittee met at 10:04 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.
Present: Senators Cochran, Gorton, and Bumpers.

DEPARTMENT OF AGRICULTURE

**STATEMENT OF MICHAEL V. DUNN, ACTING UNDER SECRETARY,
RURAL ECONOMIC AND COMMUNITY DEVELOPMENT**

ACCOMPANIED BY STEPHEN B. DEWHURST, BUDGET OFFICER

RURAL UTILITIES SERVICE

STATEMENT OF WALLY BEYER, ADMINISTRATOR

RURAL HOUSING AND COMMUNITY DEVELOPMENT SERVICE

STATEMENT OF MAUREEN A. KENNEDY, ACTING ADMINISTRATOR

RURAL BUSINESS AND COOPERATIVE DEVELOPMENT SERVICE

STATEMENT OF DAYTON J. WATKINS, ACTING ADMINISTRATOR

OPENING REMARKS

Senator COCHRAN. The meeting will please come to order.

This morning we continue our hearings to review the budget request of the administration for the fiscal year that begins next October.

We appreciate very much the presence this morning before our committee of the Acting Under Secretary for Rural Economic and Community Development, Michael Dunn.

Joining him at the witness table this morning are Wally Beyer, Administrator of the Rural Utilities Service; Maureen Kennedy, Acting Administrator of the Rural Housing and Community Development Service; Dayton Watkins, Acting Administrator, Rural Business and Cooperative Development Service; and Stephen Dewhurst, our all-knowing budget officer at the Department of Agriculture. [Laughter.]

We appreciate very much all of you coming before the committee.

We have your statements. We hope that you will help us better understand some of the requests that are being made by the administration—the allocation of funds as proposed by the administration for the activities that come within the jurisdiction of your various offices.

The bill reported by the House Appropriations Committee on Thursday of last week proposes a number of rescissions affecting the Department of Agriculture's rural housing and economic development programs.

It would be helpful to the committee today if you could let us know what your reactions to these proposals are, what the impact would be on the delivery of services and the conduct of your offices under the law.

We have your written testimony. We hope you will proceed to summarize your statement and make any additional comments that you choose. Then, we will have an opportunity to discuss your testimony and ask questions.

You may proceed, Mr. Secretary.

STATEMENT OF MICHAEL DUNN

Mr. DUNN. Thank you, Mr. Chairman. I appreciate the opportunity to present the President's budget to your committee.

I would also like to inform the committee that in our audience here we have Bruce Crain who is the director for the AARC Program, and Jeff Gain, a newly elected member of the AARC Center Board of Directors.

Mr. Chairman, we are very pleased with President Clinton's budget as it was submitted because it shows—it demonstrates a clear commitment by this administration to rural America, primarily in providing good jobs for working families in rural America, those commitments for rural businesses, for policies to allow them to be more productive, both today and tomorrow.

There is an overall economic challenge in rural America. We know, from past experience, that rural communities are usually the last to gain from recoveries and the first to suffer when we have economic setbacks.

We believe that the President's budget will provide real opportunities in rural America.

The commitment that the President has made is rather significant at a time that more austere budget proposals by administrations—we see an increase in program level of between \$1.5 and \$1.6 billion for the rural economic and community development area.

The communities must also help themselves, Mr. Chairman. Our programs are targeted to areas where the marketplace cannot adequately do the job.

We will work together, in concert, with local citizens and State government, businesses, and communities to develop the expertise, the resources, and the solutions for their particular, unique needs.

We are trying to establish here, Mr. Chairman, a leaner, not meaner, administration in the rural economic and community development area.

As you are well aware, President Clinton and Vice President Gore have asked us to reinvent Government through the "National Performance Review."

The Department of Agriculture began over a year ago with the reorganization proposal that was passed by Congress.

These programs are going to be customer driven. We are going to empower our employees. We are going to develop benchmarks and performance measures to ensure that we can meet the guidelines of the Government Performance and Results Act.

Our next step in NPR2, is to ensure that we provide better customer service and provide greater decisionmaking authority in the field, with rural partnerships performance initiatives, which I will talk more about later.

We will make programs more flexible. We will streamline to make it easier for local communities to use. It will result in greater opportunities to leverage State, local, and private and nonprofit resources to rural communities.

This budget is consistent with the President's belief that job creation provides opportunities in long-term community stabilization.

Federal programs can help communities provide basic services, safe drinking water, health care, housing, telecommunications, education, and transportation, which all allow rural communities to better compete in a global economy.

In last year's reorganization, the areas within the rural economic community development services were reestablished. Today we have three services, the Rural Utilities Service, which has the former programs of rural electric, the electric and telephone programs, and the water and sewer programs from the former Rural Development Administration.

We have Rural Housing and Community Development Service, which has the single-family and multifamily programs from the former Farmers Home Administration, as well as the community facility programs from the former RDA, community facility programs for hospitals, police stations, fire stations, and such.

And then we have the rural business and cooperative development services. Those are the B&I programs from the former RDA, the economic development loan and grant programs from the former REA, combined with the cooperative development services and the Alternative Agricultural Research and Commercialization Center.

What we have tried to do, Mr. Chairman, is to logically outline our programs into infrastructure programs, housing development programs, and business development programs.

This also sets us up then to take the second step of "National Performance Review Two." And that is to reengineer our business practices, to improve our program delivery, and to eliminate administrative burdens that we might have.

As you are well aware, part of that reorganization is also calling for collocation of our field offices with the natural resource conservation services and consolidated farm service agencies to provide a single, USDA service center.

This will be enhanced by our initiatives in Info Share, which provides an umbrella to provide communications and business process reengineering to take advantage of a one-stop shopping center.

We believe in further delegation to the rural economic and community development State directors authority and responsibility for them to manage their own programs. We have, in fact, given them greater delegation of authorities in areas of their own administrative budget.

We will do even more delegation to the State directors in fiscal year 1996. Moving decisionmaking authority and responsibilities to a level of the organization best suited to deal with particular problems is an integral part of our overall design.

Mr. Chairman, we are pledged to no more micromanagement out of the national office for State operations. So far, we have been able to reduce headquarters staff substantially.

The President has asked us to have a 50-percent reduction in our headquarters staff. We are on our way to achieving that and have plans in place.

Since fiscal year 1993, we have eliminated 619 positions. This has not been through any adverse personnel action, but has been done through attrition.

And we will continue in that vein to achieve the reductions that we need for our streamlining levels.

We are in the process of carrying out the President's mandate of a 50-percent reduction of our internal regulations. And we are trying to ensure that customers drive what we do within the organization—within the services.

We have recently had a survey of 9,500 of our active borrowers. And what we found, Mr. Chairman, was rather enlightening.

They rated our employees on a scale of 1 to 5, with 5 being the highest. They gave our employees an overall rating of 4.2, which tells us that they are pleased with the way they are being treated by our employees.

They also were very complimentary of our programs.

Mr. Chairman, where they gave us low marks, it should not surprise you. It was the overlapping and duplication regulations, the excessive amount of time it took to get an application processed, the fact that once it was processed, there may or may not be funds available.

And even when we found a mistake, it took us an inordinate amount of time to correct that mistake.

We are also focusing our resources, Mr. Chairman, on areas that have the greatest amount of need, the 500 underserved counties, the Colonias, The Delta, Great Plains and Pacific Northwest, and areas where—that are being affected by base closings.

Part and parcel of what we are also trying to do is designing to build more local capacity. Our objective is to use our limited programs to encourage rural residents to work with the private sector and with us in stimulating the rural development for good paying jobs, and to use their own resources as well as the resources that we may muster from the Federal Government.

There was recently a report out by the American Bankers Association. And what they identified were needs that commercial banks needed in rural areas to assist them in economic development activities.

There were five areas that they, specifically, zeroed in on. One was a need of new sources and types of lendable funds. Second was a secondary market for economic development loans.

Third was an increased access to equity capital for startup and growth. And fourth was improved access to specialized project and analysis, business, and technical transfer. And fifth was support of intergenerational transfer of businesses.

Mr. Chairman, we have met with other financial agencies in rural America, Farm Credit System, credit unions, et cetera. And they indicate there are similar types of needs.

Rural performance partnership initiative, which I talked about earlier, is one of the key points of the President's budget proposal.

What it would do is consolidate 14 of our programs into three funding streams. It would transfer the budget authority—between the programs—to allow States to transfer up to 25 percent within their budget streams that they get for each of the programs, but not to exceed 10 percent nationally.

State directors, working in concert with the State government, local government, community-based organizations are to design a strategic plan for the State to help identify places where these funds should go.

This initiative gives employees more flexibility than being mere loan officers. They can become proactive, Mr. Chairman.

We will need to retrain our field staff, to change the culture of the agency, to ensure that they understand that this new proactive role is something new and different for them.

But we feel that giving our employees at the local level the opportunity to design programs that meet the specific needs of those communities is much better than the old programs of asking communities to ask for programs that are specifically Federal in nature and not necessarily addressing their concerns.

Mr. Chairman, we have had a nice increase in the President's budget in our program in the Rural Housing and Community Development Service; last year we had a program level of \$3.547 billion. This year, we are asking for a program level of \$4.322 billion.

Rural Business and Cooperative Development Service, we expect to have a program level of \$714 million in fiscal year 1995. This year, we are asking for \$1.045 billion.

Last year, in Rural Utilities Service, we had a program level of \$2.721 billion. This year, we are asking for a program level of \$3.248 billion.

Mr. Chairman, that gives us a program level for this fiscal year 1996 budget of \$8.615 billion as opposed to the \$6.982 billion that we had in last year's budget.

And finally, Mr. Chairman, I would be remiss if I did not comment a bit on what the rescissions might do to our efforts in rural development.

Primarily, the rescissions that are proposed in the House gut our 515, or multifamily program. It takes out our local technical assistance and planning grants that would allow us to develop local capacity.

It takes \$3 million from our Alternative Agricultural Research and Commercialization Center which provides for new businesses

and new processing and new entrepreneurial opportunities in rural America.

It cuts back on our telecommunications programs, especially low interest loans to those communities that are the most needy.

Mr. Chairman, we need to have rural America on the information superhighway. Those rescissions would hamper our ability to do so.

Other areas within that rescission, although not in the rural economic community development area per se, would also have an impact.

Cutting back on nutrition programs for children, for instance, has a double-edged sword for us. We know that the WIC Program, for instance, saves a great deal in health care costs. And in rural America, we are plagued by health care concerns.

In addition to that, a great deal of income in rural America is still derived from the agriculture sector, which is a source of renewable wealth.

School lunch programs and others were designed not just to provide lunches for needy children, but also to have a mainstay and a stabilization of agricultural prices which helps the rural economy.

Mr. Chairman, I thank you for the opportunity to address your committee and would take any questions that you might have at this time.

PREPARED STATEMENTS

Senator COCHRAN. Thank you very much, Mr. Secretary. We have your prepared statements and they will be made part of the record.

[The statements follow:]

PREPARED STATEMENT OF MICHAEL V. DUNN

Mr. Chairman and members of the Committee, I am pleased to be here today to present to you the fiscal year 1996 budget request for the agencies of the Rural Economic and Community Development mission area, and to discuss with you the new directions that we propose for the Agencies and the programs included in this budget request.

With the permission of the Committee I would like to summarize my remarks, and ask that my entire statement be entered into the record.

President Clinton made a commitment to the people of rural America early in his administration. He made a commitment to working people to push for jobs at wages that could support a family. He made a commitment to businesses across rural America to pursue policies so they could become more productive today and compete tomorrow in an increasingly global economy. He made a commitment to assist rural communities so that they could overcome the economic challenges facing them so that the people who grow up in small towns and who want to stay there can. It's all about creating jobs in places where many Americans prefer to live—rural America.

The funding proposed by President Clinton is an unmistakable signal that the President believes in the effectiveness and importance of these programs and the role played by this mission area.

The President's budget proposal for fiscal year 1996 represents a \$1.6 billion increase for the programs administered by the agencies that compose the Rural Economic and Community Development mission area. This budget demonstrates very clearly that the programs we will discuss today are an important component of and integral to the President's total vision of the role the federal government can play so that local communities themselves can find solutions to their problems.

As with individuals, President Clinton feels communities have an obligation to help themselves—not depend on government. We feel our programs help communities and businesses help themselves. Public resources should be targeted to areas where the marketplace cannot adequately do the job so that disadvantaged commu-

nities have the chance to compete. In this way, the federal government can help local citizens, businesses and communities work together to develop expertise, resources, and solutions to their unique needs.

The President wants government to be "leaner—but not meaner." He has told federal agencies through the National Performance Review (NPR) to put customers first. I couldn't agree more with the President. More than a year ago this mission area began that effort and we are ahead of most agencies in implementing NPR.

Our reinvention focuses on customers, placing greater responsibility with field managers, and developing benchmarks and accurate performance measurements. By the end of this fiscal year, every RECD employee will have participated in extensive customer service training. We're building our strategic plan around our customers' needs as they have expressed them to us. By the end of this year we will also have established contracts between myself, the administrators and our state directors based on the performance measurements to which state directors will be held accountable.

The next step in our effort to better serve customers and to place greater decision making authority in the field is the Rural Partnership Performance Initiative. We developed this initiative to make rural development programs more flexible, more streamlined, and easier for local communities to use. We believe the end result will be greater leveraging of state, local, and private and non-profit resources.

Most of all, the budget is consistent with the President's belief that jobs create increased opportunity and long-term community stability. Federal resources can help ensure that rural communities have access to certain basic services—safe drinking water, health care, housing, telecommunications, education and transportation so that their businesses and workers can compete in the global economy. More immediately, our programs help rural communities survive and prosper by helping local businesses and by providing decent and affordable housing, all of which lead to economic stability, expansion and increased employment.

Last year Under Secretary Nash outlined for you some of the changes that we felt were necessary to make the organization more responsive to the residents of rural areas. I would like to begin today by telling you of some of our accomplishments, and then describe additional reforms that we have in mind.

We are in the process of completing the reorganization of the mission area which now comprises three new agencies: Rural Housing and Community Development Service, Rural Business and Cooperative Development Service, and Rural Utilities Service. This has allowed us to bring together the staff specializing in the programs of those agencies.

As I mentioned before, our reorganization efforts have been guided by the principles set forth by President Clinton and Vice-President Gore in the National Performance Review initiatives. These principles include streamlining government operations, improving customer service, empowering employees, and reengineering business practices to improve effectiveness and efficiency.

As part of these reorganization efforts all of the administrative functions of the three former agencies will be consolidated under the Deputy Under Secretary for Operations and Management and housed in the Rural Housing and Community Development Service which will provide services for human resources, management information systems, procurement, budget, financial management and Civil Rights and Equal Opportunity.

The changes brought about by reorganization will allow us to re-engineer our business practices and improve the efficiency of delivering the programs by eliminating some of the administrative burdens that have built up over the years.

In addition, the RECD field offices will be collocated, where possible, and consolidated with the offices of the Consolidated Farm Service Agency and the Natural Resources Conservation Service to provide a single USDA service center for customers to obtain information and services. The InfoShare Program will provide the umbrella for business process redesign, supported by compatible technology to make these one-stop service centers work. We have also delegated to the RECD State Directors the authority and responsibility to manage their own salaries and expense budgets. Micro-management from Washington will no longer be imposed.

The State Directors have also been delegated the responsibility to determine how the field offices in their state should be structured. It is our intent to assign more decision making authority to the State Directors in fiscal year 1996. An integral component of our reorganization plan has been to move decision making authority and responsibility to the level of the organization best suited to deal with a particular problem.

As part of the second phase of the National Performance Review, every program that we administer is being reviewed to assess effectiveness and responsiveness to our customers. We have already begun this effort with the rural business programs,

where we will soon be proposing revisions to the Business and Industry loan guarantee program regulations to streamline significantly and make them more customer friendly.

We have also gone through the initial phases of streamlining the RECD mission area. By the end of fiscal year 1995, employment will have been reduced by 619 positions since fiscal year 1993. Additional reductions are planned, and will be accomplished through attrition. We have also focused on reducing our regulations and, through waivers, we are empowering State Directors to make decisions about how best to administer the programs in their states. The new Rural Partnership Initiative, which I'll describe later, is an important example of this effort to decentralize decisionmaking. We intend to reduce our administrative regulations by 50 percent, and simplify them by separating operational procedures from regulatory material necessary to comply with the law or to inform the public.

In an effort to improve service and make the transition into a customer driven organization, we conducted a survey of 9,500 of our borrowers. In general the results of the survey indicated that customers are very satisfied with skill and personal service by our field staff—on a scale of 1 to 5 our employees rated 4.2. However, customers are frustrated with the bureaucracy when they attempt to correct their accounts; they said we have too many confusing procedures and duplicate forms. Through reorganization and by our streamlining efforts we are striving to address these complaints by empowering employees closest to the customers to make decisions. We are also providing customer service training to all of our employees.

On the program side, the Empowerment Zone and Enterprise Community program was implemented with the announcement of three Enterprise Zones and 30 Enterprise Communities. We are continuing to address the management problems found in the rental housing program, highlighted by the Congress last year. To this end we have surveyed all of our projects over 5 years old. Of the 14,000 projects, we found that about 8 percent had seriously deferred maintenance. To correct these deficiencies we worked aggressively to require uncooperative borrowers to develop workout plans, prioritized funding for rehabilitation and issued administrative procedures to prevent further abuses.

We have also seen improvement in focusing our program resources to areas that have experienced pervasive poverty, outmigration of population, or sudden, severe structural changes in their economies. These areas include the Colonias, the Mississippi Delta, the Great Plains, the Pacific Northwest, and base closings. Focusing our resources in these areas makes maximum use of limited resources and assists us in devising development strategies that are most appropriate for a given area.

From my experience in working in economic and community development, I know that if we are to see any success in economic development we simply cannot just assist communities with brick and mortar projects. The key to improving the economies of these areas is building local capacity by the creation of jobs, and the key to creating those jobs is the private sector.

The objective of this Administration is to use our limited program resources to encourage rural residents to work with the private sector and with us in stimulating rural economies and creating well-paying jobs. One of the most disturbing statistics found in studies of rural economies is that a significant percentage of rural poor families have a family member employed full time and nevertheless remain poor. This tells us that if we are going to improve the conditions in which 7.6 million rural residents still live, we have to look for opportunities to create better-paying jobs.

The American Bankers Association recently released a report of its Rural Economic Development Task Force which states that certain gaps exist for rural communities in business development efforts and community infrastructure improvements. We believe that the proper role of government is to help the finance community find ways to plug these gaps, and when necessary provide the financial assistance required to help the private sector create jobs. The ABA task force identified five tools needed to strengthen the ability of bankers to support lending for economic development in rural communities. These tools are new sources and new types of lendable funds, a secondary market for economic development loans, increased access to equity capital for start-up and growth business, improved access to specialized project analysis, business and technology transfer and consulting for start-up and growth business, and tools to more effectively support intergenerational transfers of existing community businesses.

We have initiated discussions with the task force on ways we can assist local bankers to develop these tools. For example, we have an active secondary market for our guaranteed Business and Industry loans and we could explore means of expanding this market to accommodate other private loans.

The Administration is committed to assisting rural America build a future so that its people can compete and prosper in the national and global economies. The alternative is to continue to relegate these communities and residents to a deteriorating economic future.

PERFORMANCE PARTNERSHIP INITIATIVE

I have learned from my experience that while the categorical assistance programs of the Federal, and State governments in some cases, have been very successful in meeting very specific needs of rural residents, they are not flexible enough to allow us to fully use them as tools in more meaningful and sustainable development efforts.

We need to do two things to be more successful. First, we need to change the way we utilize the programs. We propose to consolidate some of the funding for the programs in this mission area, and allocate this funding to our State Directors along with the latitude to tailor assistance to meet the real needs of rural areas.

This new approach is the Rural Performance Partnership Initiative through which we will consolidate the funding of 14: including the new construction portions of the rural rental housing and rental assistance programs, direct and guaranteed community facility loans, water and waste loans and grants, direct and guaranteed business and industry loan guarantees, rural business enterprise grants, rural technology and cooperative development grants, local planning and technical assistance grants, solid waste management grants, and community fire protection grants.

We are proposing that the budget authority for these 14 programs be appropriated in three funding streams, one for each of the three services. We are also requesting that the Secretary be provided the authority to transfer a portion of the budget authority among the three funding streams. States would be authorized to transfer up to 25 percent of the funds among the accounts, but no more than 10 percent could be transferred nationally. This authority would increase the flexibility of the State Directors to address the problems of their state. For example, if housing is identified as the primary problem, and a State's allocation of housing funds is not sufficient, then the State Director could transfer budget authority from one of the other program areas to meet that need.

We are also proposing changes in the substantive authority of these programs to provide us the flexibility we think is needed to have more meaningful success with these programs. Some of the changes under consideration include providing the authority to use a mix of assistance, direct loans, loan guarantees, and grants on any project, based on the ability of the applicant to pay, and to provide for funding decisions to be based on a competitive basis, as opposed to first come, first served.

The second thing we need to do is to grant our employees the flexibility to be more than loan officers. We propose to retrain our field staff and give them the skills needed to work with State and local governments, the private sector, and others in developing projects that contribute to the economic improvement of rural areas.

We have very capable staff throughout the country, but the present structure of our programs has created a situation in which most of them are skilled in narrowly focused programs. Very few of them have been given the opportunity to work with the total array of programs. This practice has been limiting, not only for the employees, but the people we serve as well.

I would now like to make a few comments about the individual budget requests.

RURAL HOUSING AND COMMUNITY DEVELOPMENT SERVICE

From recent data that we have reviewed, it is abundantly clear that these housing programs have contributed significantly to the success in reducing the incidence of rural residents occupying substandard housing. According to the 1990 Census data, fewer than one million rural households are now classified as substandard. This represents a decrease of 66 percent over the last 20 years. This is a remarkable achievement and one in which all of us can and should take pride.

However, the data also tells us that we still have a relatively high number of rural residents residing in substandard housing. Unfortunately, Mr. Chairman, a significant percentage of these are children and the elderly. For the housing programs administered by the Rural Housing and Community Development Service we are requesting a total program level of \$3.5 billion, including \$1.2 billion in direct loans for low-income families who require interest credit assistance in order to attain adequate housing. This request includes \$1.3 billion in loans for the unsubsidized guaranteed loan program which primarily assists those middle income families who need only the assistance of a government guarantee to improve their

housing. We request \$220 million in loans for our multifamily housing program that many rural Americans rely on to provide safe and adequate places to live.

Our request also includes \$353 million for the community facilities direct and guaranteed loans and rural fire protection grants which now are delivered by RHCDS. Our community facilities loan programs make essential services possible for rural residents who live in communities that are too small, too poor or too isolated from sources of private financing to provide these facilities. The highest priority established for using these funds for the past several years has been health care and public safety projects. Over 70 percent of the \$3.1 billion appropriated since 1974 has been used for these types of projects.

RURAL BUSINESS AND COOPERATIVE DEVELOPMENT SERVICE

In addition to the fact that so many poor rural families already have a member employed full time and yet remain poor, it is also disturbing that about the same number of poor people are in rural areas as there were in 1980. According to 1990 Census data there were 7.6 million people below the poverty line in rural areas, about 13 percent of the total rural population.

Creating additional jobs and higher paying jobs is the answer to this problem, but creating these jobs is also part of the answer to other problems in rural areas. If good paying jobs are created, there should be less demand for other types of program assistance.

The budget request for Rural Business and Cooperative Development Services is just over \$1 billion. This includes an increase in the guaranteed Business and Industry loan program of \$250 million above the level appropriated for 1995 and a request for \$50 million for a new direct Business and Industry loan program. In 1994 the RBCDS programs accounted for over 32,000 jobs either saved or created.

The RBCDS budget also includes a significant increase for the Alternative Agricultural Research and Commercialization Center which provides financial assistance for the commercialization of new uses for agricultural products. We recommend a level of \$6.8 million for the AARC program that is used to purchase equity and enter into other financial arrangements with these new ventures. In addition, the budget includes a new \$25 million direct loan program for AARC. This direct loan program will allow us to greatly expand financial assistance that will address the same purposes as the existing program.

RURAL UTILITIES SERVICE

The rural electric and telephone programs have been remarkably successful government ventures. Both have contributed significantly to the development of rural economies, and will continue to play a very important role in economic development. The telephone program, in particular, will have a major role in the immediate future as it helps to provide the infrastructure necessary to connect homes, businesses, medical facilities and schools to the Information Superhighway.

Information systems and telecommunications are projected to be a primary source of employment and economic activity for the next several years. The Council of Economic Advisers has estimated that investments in the telecommunications industry have the potential to add between \$120 and \$160 billion and 1.4 million jobs to the Gross Domestic Product over the next decade. The businesses stimulated by this investment will be insensitive to location as long as all areas have access to the Information Superhighway. Rural areas with the required infrastructure will be in position to compete for this increase in economic activity.

The budget request for RUS totals \$3.2 billion in program activity, and this includes \$1.5 billion for the Water and Waste Disposal loan and grant programs which have been transferred to RUS. This level includes a slight decrease in the loan program and a \$90 million increase in the grant program. This increase will be used for the Water 2000 Initiative, that is designed to provide safe drinking water to the estimated 400,000 rural households that still do not have running water.

The 1996 budget also proposes to completely privatize the Rural Telephone Bank. In 1996 100 percent of the Class A stock owned by the Federal government will be retired and a new Board of Directors will assume responsibility for managing the Bank.

Our request includes \$100 million for a new loan program for Distance Learning and Tele-medicine Link projects. As the subcommittee knows, we have administered a rather small grant program for these projects for the past few years, and each year we have significantly more applications than we can fund. We believe that many of these projects can be funded with loans rather than grants, or perhaps a combination of the two, in some cases. Most of these loans would be made at the Treasury interest rate which involves relatively little subsidy cost. Twenty-five per-

cent of the loans, however, would be made at 5 percent and would be targeted to those areas least able to pay.

Mr. Chairman, this Administration is committed to rural America. During the past year we made several changes in our operations to improve our responsiveness to rural residents and we will continue to make improvements. We have participated in the creation and implementation of major domestic initiatives such as Empowerment Zones and Enterprise Communities, we have continued our involvement in the Pacific Northwest Initiative and have assisted the Colonias along the U.S.-Mexico border. The Pacific Northwest Initiative in particular has been a very effective process for state and local interests to work together cooperatively and productively. And we did all of this while continuing to deliver the core programs that rural Americans look for. These accomplishments are a tribute to the dedicated and skilled staff working for this mission area.

FISCAL YEAR 1995 RESCISSION PROPOSAL

The House is currently considering a rescission of fiscal year 1995 funds. The proposed reductions in the rural economic and community development area would materially impact rural housing, rural business development and rural utilities. The proposed rescission of section 515 rural rental housing would eliminate the entire program this year. Some 3,750 family housing units would not be built. It seriously jeopardizes the efforts to repair and rehabilitate projects to eliminate health and safety violations and to correct Fair Housing/Equal Opportunity design deficiencies.

The rescission would also eliminate the Local Technical Assistance and Planning grant program. This would hinder our ability to train and provide technical assistance to small rural businesses and local governments. Generating jobs and training for jobs in rural areas and helping local governments become more effective are critical areas of building the rural economy.

The rescission proposal would also critically limit the capital available in the Alternative Agricultural Research and Commercialization program. A cut of \$3 million is proposed, a one-third reduction in program level. This small venture capital program will create some 3,000 jobs over the next five years. This program utilizes excess commodities to stimulate rural economies by creating new jobs.

A \$3 million cut is also proposed in the Telecommunications Loan program. This would cut the program substantially below current demand and would delay access to the information superhighway for rural telecommunications borrowers since those who qualify for hardship loans would have difficulty finding funds from other sources.

Mr. Chairman, this concludes my statement. The Administrators and I will answer any questions that you or members of the Committee may have. Thank you for allowing me the opportunity to present to you our 1996 budget.

PREPARED STATEMENT OF WALLY BEYER

Mr. Chairman and Members of the Subcommittee, I am pleased to accompany Acting Under Secretary Michael Dunn and appear before you to present the 1996 Budget and Program Proposals for the Rural Utilities Service.

Rural America comprises over 80 percent of the American landmass. It is a continent of opportunities. However, because of distance, isolation, and the lack of scale economies, many rural communities suffer from sluggish economies, outmigration, inadequate services, and lack of employment opportunities. That is why the public/private partnership is, and will continue to be critical to the survival and growth of rural America. Growing up on the Great Plains, I saw firsthand the benefits of rural electric, telecommunications and rural water cooperatives. With Federal assistance, rural people built the foundation of infrastructure which transformed rural life and generated the rural economy. The public investment is money wisely spent.

The National Information Infrastructure is having a profound impact on rural America. Electronic commerce, distance learning, telemedicine, teleconferencing and telecommuting are realities today. The technologies are here and need to be available to rural America. Notwithstanding new technologies, the basic infrastructure development principles are the same: 1) the Federal role is still crucial due to the lack of scale economies, distance and isolation; 2) with initial Federal investment, private capital can be leveraged so that essential infrastructure is built; 3) rural communities enhance their capacity for growth; 4) rural life will be transformed; and 5) our programs become more valuable contributors to the nation as a whole.

The Rural Utilities Service is a catalyst for a new rural era. The electric and telecommunications industries are undergoing fundamental transformations as a result of deregulation, intensive competition, and shifting technologies. More than ever,

the Rural Utilities Service needs to maintain its essential leadership role, not only in the arena of rural infrastructure, but also as a successful Federal model of partnership with local industry, and with the communities they serve. As a forerunner in providing credit, maintaining service standards, and pioneering utility construction in sparsely populated areas, RUS "primes the pump" of private sector investment, thereby generating a far greater output of infrastructure and employment. In addition to this leadership, RUS is the singular agency which provides overall policy implementation of rural telecommunications, electric, and water and waste disposal.

WATER AND WASTE DISPOSAL PROGRAM

RUS's Water and Waste Disposal Program provides loan and grant funding to bring fresh, clean drinking water to rural Americans and bring sanitary and environmentally sound water and waste water facilities. Water and waste water are basic infrastructure and quality of life issues. The extent to which a rural community has adequate water and waste water facilities in place can largely determine its capacity for economic growth.

WATER AND WASTE DISPOSAL BUDGET

The budget requests \$590 million in grants for the water and waste disposal program. This represents a \$90 million increase compared to the fiscal year 1995 appropriation. The budget also requests \$3 million for the solid waste management grant program, and a loan level of \$880.9 million for water and waste disposal direct loans, which has a \$200 million cost to government.

This funding will greatly improve the lives of many rural Americans in each of the 50 States as well as U.S. Territories. The programs will assist in reducing a number of serious, life-threatening illnesses related to water contamination, such as gastroenteritis, cholera, typhoid, and salmonella. It is estimated that 842 rural water systems and 354 rural waste disposal systems will be improved or built with these funds. This will provide 700,000 rural people living in 200,000 households with safe, affordable drinking water and dependable waste water facilities. Hundreds of thousands more will benefit from the technical assistance that will be provided to local officials that are struggling to maintain and operate their water and waste water facilities. In addition to improving the quality of rural life, there will also be economic benefits such as the generation of 13,000 direct and 20,000 indirect jobs.

PERFORMANCE PARTNERSHIP PROPOSAL

USDA proposes to include the RUS Water and Waste Disposal Program in its Performance Partnership Proposal (PPP). The PPP "pools" funds from programs under the Rural Economic and Community Development (RECD) Area and provides RECD State Directors with limited authority to adjust the mix of funding according to needs within the state. Water and Waste Disposal Grant funds (\$590 million), Budget Authority for the Water and Waste Disposal Loan funds (\$192.2 million) and Solid Waste Management Grant funds (\$3 million) would be included.

WATER 2000 INITIATIVE

Water 2000 is an initiative which has as its goal "a faucet in every home" by 2000. The 1990 Census estimates that there are approximately 406,000 rural families without complete plumbing in their homes. Water 2000 is a collaboration of Federal, state and local governments, as well as participation from the private sector. The initiative strives not only to bring about the infrastructure needed to meet this goal, but also to improve the quality of water so that rural systems can comply with the Safe Drinking Water Act. Needs assessment, technical assistance, improved communications between Federal, state, local and private participants, and innovative financing are all part of the Water 2000 strategy.

The Water and Waste Disposal programs also support the President's Rural Development Initiative, the President's Pacific Northwest Economic Initiative, the Presidential Initiative for Empowerment Zones and Economic Communities, and the Colonias Initiative. Adequate funding of these programs is needed to assure the success of the above mentioned efforts.

ELECTRIC PROGRAM

The Electric Program forms a partnership with consumer-owned rural electric cooperatives which is essential to the integrity of the system, and for the majority of co-ops, their survival. It is a cost-effective means of financing and maintaining the nationwide network of rural electric infrastructure.

Rural electric borrowers serve approximately 25 million people and cover over 75 percent of the land mass in 46 states and territories. Over the past 50 years, the Electric Program has extended credit to approximately 1,000 rural electric cooperatives which brought electricity to rural America when municipally-owned and investor-owned utilities failed to provide this basic service. With over 2.1 million miles of line, electric borrowers serve an average of 5.5 customers per mile. This compares to the approximately 35 customers per mile of line that investor-owned utilities serve, and is indicative of the higher investment per consumer that is necessitated by serving in rural areas.

The Electric Program has a leadership position in lending. Our role is crucial in generating needed private capital for rural electric infrastructure. Borrowers secure supplemental financing from private lenders, and also invest their own funds into utility plant. From 1988-1992, distribution systems increased their investment in plant and equipment by \$9.4 billion, of which the Electric Program provided \$2.5 billion or 27 percent. The generation and transmission systems increased their investment in plant and equipment by \$5.4 billion, with RUS providing only \$911 million, or 17 percent of their total capital needs.

RUS's approval of loans and loan security provide a comfort level for private lenders to follow. In fiscal year 1994, \$67.7 million in Federal subsidy generated a \$787.8 loan level, which helped to leverage an additional \$2.639 billion of private capital investment for a total annual rural electric infrastructure investment of \$3.426 billion. Without the comfort level RUS affords to private lenders by our loan approval process and security arrangements, it is a fair assumption that private financing for many rural electric borrowers would diminish.

SHIFTING PRIORITIES TO SERVE THOSE WITH THE GREATEST NEED

The Rural Electrification Administration (REA) Improvement Act of 1992 provides a mechanism for the most financially strong borrowers to buy-out of the program on a discounted basis. As a result of this law, 41 borrowers have either completed, or are in the buy-out process. So far, prepayments have returned \$270 million in loans to the Treasury. Those borrowers that can secure needed financing in private markets should do so, thereby allowing RUS to direct precious Federal resources to borrowers that have difficulty affording private credit terms.

ELECTRIC PROGRAM BUDGET

For 1996, the President's Budget requests: 1) a \$575.3 million loan level for municipal rate loans, with a cost to government of \$62.3 million; and 2) a \$100 million loan level for 5 percent hardship loans, with a cost to government of \$23.5 million. The budget also requests a \$400 million loan level for direct FFB-financed loans with a cost to government of \$3.36 million. The 1996 program requested budget authority totals \$89.2 million, compared to the \$56.2 million budget authority enacted in fiscal year 1995. The increase in budget authority requested is due largely to the increase in interest rates.

Just like the Federal highway system, the national rural electric infrastructure needs to be maintained, upgraded, and replaced when necessary. The process of developing rural America requires that reliable electric power be available, especially in areas which are in the greatest need of economic stimulation.

It is also important to note that electric borrowers provide service in 523 of the 540 rural counties rated highest in poverty, and 655 of the 700 rural counties rated highest for out-migration. We are entering into a new era of deregulation, aggressive competition, and open access in the utility infrastructure. Borrowers that serve these distressed areas stand to be the most vulnerable in weathering these changes. fiscal year 1996 funding, with the requested budget levels, will help to provide the critical financing for these systems, and to maintain the integrity of the consumer-owned rural electric cooperative system.

TELECOMMUNICATIONS PROGRAM

A key factor to rural America's resiliency and ability to adapt to market and technological change will be the ability to bring the Information Superhighway to rural America. The growth of interconnecting digital networks into an Information Superhighway will help rural America survive, prosper, and compete in any market—whether local, regional, national, or global.

The RUS Telecommunications Program provides a cost-effective vehicle for assisting rural telecommunications companies and cooperatives in building the Information Superhighway in rural America. The Telecommunications Program provides financing, establishes telecommunications standards, and provides overall policy guidance for rural telecommunications in the National Information Infrastructure Initia-

tive. The Rural telecommunications infrastructure is a national asset connecting rural communities to the mainstream global economy; and in doing so, strengthens the whole country.

RUS borrowers serve over 18 million rural Americans in 46 states and U.S. Territories. Federal dollars invested into the Telecommunications Program are used to leverage substantial private capital. In fiscal year 1994, a subsidy of \$12.1 million generated \$527.9 million in Federal loans and loan guarantees which when combined with an additional \$2.27 billion of private investment, resulted in an investment of \$2.79 billion in telecommunications infrastructure.

This infrastructure investment will provide rural telecommunications services to more than 62,000 families; install over 6,000 miles of fiber optic facilities; and purchase 200 new digital switches. These facilities will be added to the \$14.2 billion of existing telecommunications facilities operated and maintained by about 1,000 rural telecommunication borrowers.

Telecommunications borrowers also serve residents living in counties which are economically depressed. In fact, borrowers serve 884 out of the 1,042 counties which suffer most from chronic poverty and out-migration.

TELECOMMUNICATIONS PROGRAM BUDGET

The 1996 budget requests: 1) a \$300 million loan level for treasury rate loans, at a \$60 thousand cost to government; 2) \$120 million in direct FFB-financed loans; and 3) a \$75 million loan level for 5 percent hardship loans, at a cost to government of \$15 million. The requested program budget authority for 1996 totals \$15 million as compared to the enacted 1995 budget authority of \$5 million. The increase in budget authority being requested is due in large part to the increase in interest rates.

RURAL TELEPHONE BANK

The Rural Telephone Bank (RTB) was created by Congress as a supplemental source of capital for the telecommunications industry in rural America. The bank is an instrumentality of the Federal government and operates on a concurrent basis with the Telecommunications Loan Program. Under current legislation, privatization of the RTB will begin in fiscal year 1996. RTB's capital structure consists of Government and borrower equity contributions and outstanding long-term Treasury debt. Privatization refers to the retirement of the Government's equity contribution (Class A stock worth \$592 million). From its inception, the RTB has loaned over \$3.1 billion to rural telecommunications borrowers to help build the rural telecommunications infrastructure. Currently, the RTB is in a strong financial position with over \$1 billion of net worth.

As we move into the 21st Century, continued efforts to further deregulate telecommunications will drive the competitive environment in the industry. The time is right to accelerate the privatization of the RTB. Privatization would allow borrowers to leverage the existing billion dollars of net worth when borrowing additional capital from private financial markets. This would help assure a constant stream of capital which would be available to telecommunications providers to help build the Information Superhighway in rural America.

Privatization also fulfills the Administration's belief in reinventing government. Therefore, the Budget requests an appropriation for the bank to fully retire the government's Class A stock investment in the bank in fiscal year 1996. This funding will supplement funds already set aside for this purpose in the Rural Telephone Bank equity account. This proposal is achievable under current law.

RUS will be proposing legislation to the Agriculture authorizing committees to facilitate privatization in such a way that assures a continuous stream of capital for telecommunications infrastructure in rural America, and ensures that the bank will be able to compensate the government for the funding provided to accelerate privatization.

DISTANCE LEARNING AND MEDICAL LINK PROGRAM

The Distance Learning and Medical Link Grant Program has emerged as one of the most dynamic new programs in the rural development arena. Grants are made to encourage, improve, and make affordable the use of telecommunications, computer networks and related technology for rural communities to improve access to educational and/or health care services. Now in its third year of implementation, the Distance Learning and Medical Link Grant Program has funded 42 educational and 19 health care networks in 34 states. To date, \$20 million in grant appropriations has funded a total of 61 rural networks, and has leveraged over \$14.2 million in supplemental funding sources, most of which is from the private sector.

DISTANCE LEARNING AND MEDICAL LINK GRANT BUDGET

The budget requests \$15 million for fiscal year 1996. This amount represents double the amount which was appropriated for fiscal year 1995. The demand for funding projects under the Distance Learning and Medical Link Grant Program (DLMLGP) has exceeded the availability of funds since the program was first implemented in 1993. Currently there are 253 applications which are being considered for 1995 funds. fiscal year 1995 appropriations for the DLMLGP is \$7.5 million. The total amount requested from the 253 applications is \$79.5 million. This will leave \$74 million in unfunded applications.

RUS anticipates that the demand for program funds will increase, based on the overall volume of inquiries, the filled-to-capacity attendance at the 1994 Distance Learning Medical Link Conference and the 9,000 requests for DLMLGP application kits.

PROPOSAL FOR DISTANCE LEARNING AND TELEMEDICINE LOANS

In view of the public response to the Distance Learning and Medical Link Grant Program, and the need for additional financial resources in this area, the President's Budget calls for a loan component to the program, requesting \$25 million in 5 percent loans and \$75 million in Treasury rate loans. The fiscal year 1996 budget authority is \$3.9 million.

RURAL BUSINESS NETWORKS

The Rural Business Partnership Loan is a yet-to-be-implemented program which had its legislative origins in the 1990 Farm Bill. RUS plans to implement this program as part of the Telecommunications Program. Electronic commerce is the mainstream of today's business. Rural businesses cannot fully participate in today's economy without electronic data interchange and other services available through digital networks. The Administration requests \$15 million in funding for this loan program in fiscal year 1996. This will require a subsidy of \$594,000. The loans will be provided at 5 percent and market interest rates.

ADMINISTRATIVE BUDGET

The budget requests \$73.2 in Administrative expenses for 1996, compared with the \$78.7 million which was requested in fiscal year 1995. The \$5.5 million decrease results from the privatization of the Rural Telephone Bank and the downsizing and streamlining of administrative operations. We intend to continue our efforts in deriving maximum efficiency out of fewer human resources in this process of downsizing.

CONCLUSION

In a new world order of global competition, we have no choice but to think in long-term strategies. It is not unusual for Japanese high technology firms to have 100-year business plans. In this new world order, it is not far-fetched to develop national strategies requiring investment into national infrastructure which supports the growth of high technology. Programs of the Rural Utilities Service are tailored to leverage private resources, build communities and empower people with tools for communication, commerce and community growth. America's full economic power will not be "unleashed" until the human resources which exist on 80 percent of our continental landmass are equipped to unlock the enormous wealth of intellect, promise, goods and services which are part of our great country.

Thank you for your time and consideration.

PREPARED STATEMENT OF MAUREEN KENNEDY

Mr. Chairman and members of the Committee, I am Maureen Kennedy, Acting Administrator of the Rural Housing and Community Development Service. My responsibilities under the Rural Economic and Community Development mission are the housing and community facilities programs previously managed by the Farmers Home Administration and the Rural Development Administration. So while the RHCDS is new, its programs have been providing rural Americans housing and essential community services for many years. Using RHCDS financing, each year hundreds of thousands of moderate, low- and very low-income rural families build, rent, purchase or improve homes. Each year hundreds of rural towns and villages create or improve services through the guaranteed and direct community facilities programs.

Our goals are twofold: to provide credit to families and communities that still don't have effective access to credit because of the isolated nature or small scale of the rural market; and to provide subsidies to those low-income families and communities that could not otherwise afford rent or debt service payments.

SINGLE FAMILY HOUSING

Our single family housing programs enable thousands of rural families to experience the pride of homeownership and to create equity. At the same time, our borrowers, as they pay their bills, are helping to strengthen the economy of their community. Every newly-constructed house creates at least 3,600 hours of employment. Our borrowers purchase goods and services in their local communities and they create a tax base to support essential services. Our direct funds are targeted to families with greatest need, while our guaranteed programs ensure that rural middle class families are not denied the American Dream of homeownership simply because of where they live.

We are increasing our reliance on guarantees for those families and communities who can afford market rates. We cannot hope to serve the same customer base more cheaply simply by shifting from direct loans to guarantees but we are taking steps to steer and/or graduate borrowers who can be effectively served into the guarantee programs. Wherever possible, we are encouraging applicants to leverage RHCDS funds with those of other public or private sources.

Our request for appropriated subsidy for our direct single family housing loans is about \$252 million which will make available \$1.2 billion in loans. A priority for the program is underserved, impoverished, or economically declining rural areas. In fiscal year 1995, after the subsidy rate calculation was adjusted to reflect credit reform requirements related to increasing interest rates, the supportable loan level is estimated to be \$934 million.

We look forward to working with you to stretch our resources by every possible means. We are now revising our Section 502 direct loan program regulations to reduce the cost of this program. These changes will require very low- and low-income borrowers to pay an interest rate in accordance with their income as compared to a percentage of the median income of the area. This will enable RHCDS to serve more families at the currently requested budget authority cost. Under the revised regulation, we anticipate serving essentially the same customers as in the past.

For guarantees, we request an appropriation of \$2.2 million that will enable \$1.3 billion to be delivered to rural borrowers who are able to secure private loans because of the addition of a Federal guarantee. We propose to serve an increase of 9,520 individuals or families in the year ahead.

Our repair loans and grants help low-income homeowners, particularly the elderly, pay for repairs to make their dwellings safe, sanitary, and weather-tight. We propose to make \$35 million in loans for these borrowers, which will require an appropriation of \$14.2 million. For home repair grants we are requesting \$24.9 million, the same amount as last year.

An appropriation of \$13.1 million is requested, to make \$75 million in loans available to finance the sale of housing from the Department's inventory. This program is critical to the Agency because it gives us an important tool for the sale of inventory property, thus avoiding additional costs and losses to the taxpayer. The majority of the \$75 million is for loans to program eligible borrowers.

We are striving for maximum program effectiveness along with improved fiscal integrity. RHCDS recognizes the need for a modern Dedicated Loan Origination and Servicing System or DLOS, to replace the current antiquated, costly to maintain system established in the 1960's. RHCDS will soon purchase from the private sector an escrowing and servicing system to meet congressional mandates under Public Law 100-242, which mandates escrowing for borrowers. This cost-saving system will: allow single family borrowers to manage their finances more effectively by including tax and insurance fees in monthly payments, eliminate payments we currently expend on behalf of borrowers unable or unwilling to make these payments, and will bring the Department into the 21st Century with regard to loan servicing.

MULTIFAMILY HOUSING

For those whose incomes are not high enough to make homeownership possible, we finance the construction of multifamily housing and we provide rental assistance to tenants. Census records show that the majority of low- and very low-income renters are young families with small children, elderly or disabled. Many rely on the 515 multi-family program with rental assistance to provide safe and adequate places to live. We request \$120 million in appropriated funds, an amount that will support

\$220 million in lending, We anticipate spending a majority of this figure on rehabilitation of existing developments.

We are working hard to rid our 515 multi-family housing program of problems that could endanger the health and safety of tenant families, and that cost the taxpayers an unreasonable amount. These problems emerged last year and received our immediate attention. The good news is that a detailed inspection of 70 percent of multifamily housing developments nationwide found that less than 10 percent of families served faced major maintenance and repair problems. The great majority of our 515 developments nationwide are properly managed and maintained, and State Directors across the country are working hard to improve and protect this record.

Our request for the rental assistance program, which makes rural rental housing affordable for tenants, is \$587 million, a \$64 million increase above the current year. This amount will cover renewals of contracts on existing units, cover the most urgent servicing needs, and allow assistance on 1,525 units of new construction.

Also, in the coming year we will increase our "wage matching" efforts: matching income reported on state or federal tax or unemployment insurance forms with that reported on eligibility forms. This effort will help ensure that we accurately determine client eligibility for rent subsidy for multifamily housing, will ensure that those assisted under our programs "play by the rules," and will deter misreporting in the future.

The Administration is committed to improving the quality of housing for the country's farm laborers. An appropriation of \$9.5 million is requested to make \$16.5 million in loans available. These loans, and accompanying grants of \$10.9 million, will be targeted to areas of greatest need.

COMMUNITY FACILITIES

Schools, hospitals, fire protection and community centers provide fundamental services and a core sense of identity for rural towns and villages. Often, however, communities are too small, or too poor to provide these facilities. Our direct and guaranteed community facilities loan programs make essential services possible for rural residents. Over more than 20 years, 7,000 small communities have used the community facilities program with great success. As with our housing programs, direct lending is limited and the demand exceeds our available resources.

An appropriation of \$43.6 million will make \$250 million available for direct Community Facility loans. Priority for all direct funds will be given to low-income, unserved, or underserved communities such as the Mississippi delta region, Indian reservations, and the colonias, as well as areas affected by military base closings or other economic hardships. We want these funds to reach those communities that need them most.

For an appropriated cost of \$4.7 million, \$100 million of guaranteed community facility loans will be made available to communities able to secure private financing with the assistance of a Federal guarantee. Full funding of our request for community facility loans would enable 9.4 million rural Americans to be assisted through 473 loans.

EMPOWERMENT ZONES AND ENTERPRISE COMMUNITIES

The Empowerment Zone and Enterprise Community initiative targets resources to low-income rural areas to demonstrate that innovative, comprehensive, strategic alliances between private, public, and nonprofit entities can work to improve the economic strength of rural communities. Earmarks from RHCDs for this initiative include an appropriation of \$1.5 million for direct Community Facility loans that will make \$8.7 million in loans available to be used in rural empowerment zones and enterprise communities.

PACIFIC NORTHWEST INITIATIVE

Funds will be made available for the President's Pacific Northwest Economic Recovery Initiative that assists workers, families, businesses, and communities in Northern California and the Pacific Northwest adjust to declines in the timber industry. In addition to the State allocation, \$15.8 million for direct Community Facility Loans and \$11.2 million for guaranteed Community Facility loans will be available to be used in Pacific Northwest Initiative communities.

PERFORMANCE PARTNERSHIP INITIATIVE

The Clinton Administration has proposed to improve service delivery by adding flexibility to respond to local needs. Currently, funding for the various categorical

programs is distributed among the States separately for each program. Our Performance Partnership Initiative would allow RECD State Directors to consult with State and local governments and with the State Rural Development Councils and then adjust the mix of funding they administer to better meet the needs of local government. The Performance Partnership Initiative continues the policies of the National Performance Review and the USDA reorganization by moving decision-making authority closer to rural communities. Under the Performance Partnership Initiative legislation, we would "pool" the budget authority appropriation for the multifamily housing new construction loans and the related rental assistance, community facility loans, and fire protection grants and allocate these funds to RECD State Offices to be used for eligible projects that best meet the States' needs.

ADMINISTRATIVE EXPENSES

The request for administrative expenses for the Rural Housing and Cooperative Development Service is \$447 million. Administrative overhead was reduced by over \$12 million through reductions in such areas as automated data processing and contracts. This level will support 7,326 staff years and will enable us to realign field offices to make our program delivery more efficient.

PREPARED STATEMENT OF DAYTON J. WATKINS

Mr. Chairman and members of the Committee, I am pleased to present the Administration's fiscal year 1996 budget for the Rural Business and Cooperative Development Service (RBCDS). The RBCDS programs were formerly administered by the Rural Development Administration (RDA) and the Rural Electrification Administration (REA).

The mission of RBCDS is to enhance the quality of life for all rural Americans by using our financial and other resources, including cooperative and community outreach resources, leveraging them with cooperatives and private sector lenders to meet business credit needs in underserved rural areas.

We focus our program resources to areas that have experienced pervasive poverty, out-migration of population, or sudden, severe structural changes in their economies. We empower rural residents and develop economic opportunities by enhancing the existing public and private credit structures through our loan and grant, cooperative development, technical assistance, and technology development programs.

Despite decades of investments in infrastructure and business development, rural America continues to face many significant challenges. Some of the challenges, like the persistence of poverty in major parts of the South and in Appalachia, have been with us for a long time. Others, such as concern over the quality of drinking water supplies, reflect shifts in the importance of issues as environmental standards have changed and as completion of public water systems allowed us to think about quality and not merely quantity. Still others, such as the loss of jobs and businesses from rural economies, are due to changes in the structure of rural economic bases and the globalization of competition.

Increasingly, it is the new problems—problems that center on the role rural communities will play in a future that relies less and less on raw materials as economic assets—that dominate the rural policy agenda. Today we are more concerned about creating jobs in remote places and in developing new industrial uses for traditional commodities. We are concerned about building economic linkages between rural businesses and the urban and global marketplaces to which they must sell. We are concerned about building economic bases on regional scales to achieve economies in production that will make rural competitiveness feasible. And we are concerned about finding solutions that pool the assets of public and private organizations to achieve holistic and forward-looking approaches to economic development.

REINVENTING GOVERNMENT

These problems, and the need for new solutions, call for new responses from the Federal government. As the leader within the Federal government for rural business development, RBCDS is taking steps to reinvent itself. One reason for doing so is to find ways to economize in the use of public resources and make its processes more "customer-friendly." Another is to change what it does—to provide better responses to the problems of today and tomorrow.

To respond to these changes in rural America's needs, RBCDS has taken a number of steps to refocus its roles in rural development. These enhanced roles are intended to position RBCDS for nationwide leadership to create stronger, more competitive rural economies. These actions are intended to achieve the following results:

- To operate as an economic development agency, not merely a loan portfolio manager
- To use its rural development grant and loan funds flexibly so it can respond effectively to diverse rural needs
- To build institutional capacity for continued self-development, and not merely fund isolated projects
- To emphasize long-term development strategies, rather than merely short-term project objectives
- To work in partnership with other organizations, not in isolation
- To undertake active outreach to communities, not passive program operation
- To target lagging places and points of special opportunity, rather than taking projects first-come, first-served
- To sponsor comprehensive support for communities, rather than limiting support to those activities its programs are able to finance
- To help communities manage the process of development, as well as fund specific projects
- To serve as a point of national focus on economic development strategies and practices.

These objectives form the basis for making changes to our program regulations, as well as for changes in organizational structure and performance that are an integral part of the overall process of reinvention within RBCDS.

Now I'd like to briefly address our program funding requests.

BUSINESS AND INDUSTRY LOANS

The guaranteed Business and Industry (B&I) loan program provides RBCDS with an excellent opportunity to work together with commercial lending institutions, Farmer MAC, Farm Credit System banks, SBA, and other lending institutions to develop a dynamic business environment in rural America. The guaranteed Business and Industry loan program assists rural companies with capital for start up or expansion. These companies create and save jobs, upgrade the infrastructure, and improve the lives of rural residents.

Last year, 163 new or expanding businesses were funded for a total of approximately \$250 million. This resulted in 5,699 jobs being created and 10,266 jobs saved. For guaranteed Business and Industry loans we are requesting an appropriation of \$6.8 million to subsidize the cost of \$750 million in loans. In fiscal year 1996 we will target these Business and Industry loan funds to those communities in greatest distress. We are requesting \$3.5 million to be appropriated to finance a new \$50 million direct Business and Industry loan program to be focused on businesses in rural America that are not able to qualify for commercial bank terms. The direct Business and Industry loan program will offer interest rates allowing additional projects to become feasible. The direct Business and Industry program can deliver an economic stimulus to areas of high poverty such as the Mississippi Delta, empowerment zones and enterprise communities, colonias, native American reservations, and Appalachia. The direct loans can focus on areas undergoing major, rapid economic transformations such as the Pacific Northwest timber communities or areas where military bases are closing. Finally, the direct loans can assist areas where traditional industries such as agriculture and mining are in decline.

INTERMEDIARY RELENDING LOANS

The Intermediary Relending Program invests Federal funds to leverage local funds in support of rural businesses and jobs. Loans go to intermediaries who in turn relend them to rural businesses to improve business, industry, community facilities, jobs, and economic diversity of rural areas. On the average, each \$100,000 of IRP money loaned by the intermediary provides employment opportunities for approximately 20–25 people. Last year RBCDS made 71 loans to intermediaries totaling \$77.4 million. It is projected that these loans, once they are relent, will create or save between 42,000 and 54,000 jobs through the term of the loan. For Intermediary Relending loans we are requesting an appropriation of \$53.7 million, the cost of \$90 million in loans. We plan to direct these funds to areas of persistent poverty such as the Mississippi Delta and Indian reservations.

RURAL BUSINESS ENTERPRISE GRANTS

The Rural Business Enterprise Grant Program finances and facilitates the development of small and emerging private business enterprises. This program can be used, among other purposes, to provide technical assistance and create relending loan funds. Last year, 234 grants for \$45.5 million were made, approximately 216 businesses were assisted resulting in the potential for 8,574 jobs being created and

4,751 jobs saved. An appropriation of \$48 million is requested for Rural Business Enterprise grants to assist small communities and rural areas where private capital is not available. These grants have been used for improving rural transportation and for transmitting information to farmers and rural residents through non-profit television. This year we are requesting authorization to target \$2 million for land grant colleges and community based organizations to reach out to rural communities experiencing economic hardships with technical assistance and education for business development.

RURAL TECHNOLOGY AND COOPERATIVE DEVELOPMENT GRANTS

The Rural Technology and Cooperative Development grant program helps promote the development and commercialization of new services, products, and processes in rural areas. This program provides grants to public bodies and nonprofit organizations to establish and operate centers for rural technology or cooperative development. We are requesting \$3.8 million, with \$1.3 million targeted for the Appropriate Technology Transfer for Rural Areas project that encourages low-input and sustainable agricultural practices.

RURAL ECONOMIC DEVELOPMENT LOANS AND GRANTS

The Rural Economic Development Loan and Grant Program promotes rural economic development and job creation projects. These zero-interest rate loans made to Rural Utilities Service electric and telephone borrowers are re-lent to provide start-up costs, project feasibility studies, and other expenses associated with rural development. Under this loan program last year, loans to 40 businesses totalling \$13.5 million were made. This resulted in 2,278 jobs being created. For Rural Economic Development loans we are requesting a 1996 appropriation of \$4.1 million, the cost of \$14.1 million in loans. Again this year we are requesting authority for Rural Utilities Service borrowers to use earnings generated by the interest differential on voluntary cushion of credit payments to make Rural Economic Development Grants in the amount of \$20 million. These grants are an opportunity for private non-profit electric and telephone cooperatives to target some funds to assist local businesses and to save and create rural jobs.

LOCAL TECHNICAL ASSISTANCE AND PLANNING GRANTS

In addition to project funding, rural communities often need technical assistance to develop proposals or maintain projects designed to improve economic conditions in rural areas. A new source of funding is the RBCDS' Local Technical Assistance and Planning Grant Program. Local Technical Assistance and Planning grants assist businesses by training rural entrepreneurs and local government officials, by establishing business support centers, and by aiding economic development training. Fiscal year 1995 was the first year of funding for this program, and we are completing regulations for the administration of this program. For fiscal year 1996, \$2.5 million is requested for this program.

COOPERATIVE SERVICES

Cooperative Services devotes its efforts to promoting the understanding and use of the cooperative form of business as a viable option for rural residents. Basic and applied research is conducted on cooperative issues and statistics are collected annually. Technical assistance is provided to groups of producers who want to organize a new cooperative and to existing cooperatives who desire assistance on a wide variety of socio-economic issues.

ALTERNATIVE AGRICULTURAL RESEARCH AND COMMERCIALIZATION CENTER

The Alternative Agricultural Research and Commercialization (AARC) Center assists the private sector in bridging the gap between research results and the commercialization of that research. This complements USDA research agencies as well as RBCDS financial programs. In fiscal years 1993-94, its first 2 years of full operation, the AARC Center invested \$15.3 million, matched by \$43 million from private partners, in 37 projects. These projects helped promote new innovative and environmentally-friendly uses for farm and forestry materials or animal by-products. These projects will create nearly 3,000 new jobs. For cooperative agreements with private firms to commercialize farm or forestry products for new uses, we are requesting \$6.8 million. These funds are matched by private partners at a minimum of a one for one basis. When recipients are successful, the Center is reimbursed and receives an investment risk premium.

AARC has approval under the General Agreement on Tariffs and Trade for a new loan program to encourage the development and commercialization of new uses of agricultural products. We are requesting \$7 million in budget authority for this program that will allow us to expand our assistance for the commercialization of new uses for agricultural products. This funding will allow us to support \$25 million in loans. The request for the Center's administrative expenses for fiscal year 1996 is \$1.7 million.

NATIONAL RURAL DEVELOPMENT PARTNERSHIP

The National Rural Development Partnership (NRDP) empowers state and local leaders by developing public, private, and intergovernmental partnerships. These partnerships bring together the resources and contributions of many agencies to promote community and economic development. At the heart of this Partnership are the 39 State Rural Development Councils that collaborate to carry out state rural development strategies and remove red tape and other impediments to effective government.

EMPOWERMENT ZONES AND ENTERPRISE COMMUNITIES

The RBCDS is pleased with the work we've done with the Empowerment Zone and Enterprise Community (EZ/EC) program over the past year. The empowerment zone and enterprise community initiative targets resources to low-income rural areas to demonstrate that innovative, comprehensive, and strategic alliances between private, public, and nonprofit entities can work to improve the economic strength of rural communities. USDA announced the designation of 3 rural empowerment zones and 30 rural enterprise communities in December of last year. Non-designated communities will also benefit from the EZ/EC application process. We will continue to work with these Champion Communities to ensure that their economic development needs are being addressed. Targets from RBCDS for this initiative include an appropriation of \$148,000 for guaranteed Business and Industry loans that will make \$16.3 million in loans available, appropriations of \$6.5 million for Intermediary Relending loans that will make \$10.9 million available, and \$8.9 million for Rural Business Enterprise grants.

PACIFIC NORTHWEST INITIATIVE

Funds will be made available for the President's Pacific Northwest Economic Recovery Initiative, a partnership between federal agencies, public, and private entities that assists workers, families, businesses, and communities in Northern California and the Pacific Northwest adjust to declines in the timber industry. Funds available to be used in Pacific Northwest Initiative communities include \$35.3 million for guaranteed Business and Industry loans, \$16 million for Intermediary Relending loans, and \$4.1 million for Rural Business Enterprise grants.

PERFORMANCE PARTNERSHIP INITIATIVE

All RBCDS loan and grant programs, with the exception of Economic Development Zero-Interest Loan and Grant programs and AARC Center direct loans and cooperative agreements are included in the Performance Partnership initiative. This proposal will allow RBCDS to shift resources and decision-making authority down to the state level. This shift will increase flexibility and responsiveness by moving our programs closer to the people we serve. The RBCDS programs that support PPI, together with other federal, public and private sources will play a key role in providing rural communities and residents with the resources that are essential for economic development.

ADMINISTRATIVE EXPENSES

The total administrative expenses request for the Rural Business and Cooperative Development Service is \$35 million which will support 413 staff years. It will also enable us to realign field offices to make our program delivery more efficient. Our request includes a decrease of administrative overhead of \$1.4 million gained by reducing planned fiscal year 1996 expenditures such as automated data processing, contracts, and other discretionary expenses.

Mr. Chairman, the Rural Business and Cooperative Development Service is proud of its achievements. We intend to continue serving the needs and enhancing the quality of life for residents in rural America.

I'd be pleased to answer any questions you or the other members may have.

BIOGRAPHICAL SKETCHES

MICHAEL V. DUNN

The Deputy Under Secretary, Operations and Management, for Rural Economic and Community Development, Michael V. Dunn, is a long-time advocate for rural America who has broad experience in agriculture, housing, banking, government, and rural development.

Dunn was President Clinton's choice as the last Administrator of the Farmers Home Administration (FmHA). He was sworn in as Administrator by former Secretary of Agriculture Mike Espy on November 30, 1993. The Agency was abolished in a Departmental reorganization on October 20, 1994, and its programs were assigned to new agencies.

Before joining FmHA, Dunn was vice president of the National Farmers Union in charge of its Washington operations. Dunn began his public career as housing director and city administrator in his home town, Keokuk, Iowa. He chaired the State's City Development Board, is a former commissioner of the Iowa Development Commission and was executive director of a regional planning and economic development district. He worked as the FmHA's Midwest director from 1977 to 1981, and as a staff specialist on farm credit and rural development with the Senate Committee on Agriculture, Nutrition, and Forestry.

Dunn's experience came in handy in running the FmHA, the Department of Agriculture's rural credit agency, which had 12,000 employees and a \$49 billion portfolio of farm and rural housing loans. Formed in 1935, FmHA provided credit to rural residents unable to get credit from commercial sources at reasonable rates and terms. FmHA also guaranteed loans made by commercial lenders for farm operating needs, farm ownership and modest rural housing.

As Administrator, Dunn sought to target historically underserved segments of the rural population: women and minorities. He emphasized the importance of customer service to the 800,000 rural families served by the agency. He stressed supervised credit—close, one-on-one relationships between FmHA staff and borrowers. He also set about to redefine the Agency's image as the "lender of last resort" to "lender of first opportunity." Dunn argued that the latter term better recognizes that many FmHA borrowers would not have had an opportunity to enter or remain in farming or have a safe and decent place to live without the Agency's programs.

Under the Departmental reorganization, Rural Economic and Community Development agencies have responsibility for the Department's housing, community facilities, utility, business and cooperative services programs to aid in the development of rural America. RECD programs and services are provided through a network of State, District, and County offices.

Dunn and his wife, Brook, have four sons.

WALLY BEYER

Wally Beyer is the first administrator of the Rural Utilities Service, which administers the electric and telecommunications programs previously handled by the Rural Electrification Administration and the water and waste disposal programs previously in the Rural Development Administration.

REA and RDA were abolished in October 1994 by the reorganization of the U.S. Department of Agriculture. RUS is an agency of USDA.

Beyer served as the 12th administrator of REA. He was nominated by President Clinton in October 1993 and confirmed by the Senate in November 1993 to a 10-year term. In addition, he oversees a distance learning and medical link grant program and serves as governor of the Rural Telephone Bank, a source of supplemental funding for rural telephone systems.

RUS and the former REA and RDA agencies have approved more than \$76 billion in loans and guarantees and nearly \$5 billion in grants since the electric program was started in 1935, the water and waste programs in 1940 and the telephone program in 1949. Beyer manages an outstanding loan portfolio of more than \$43 billion.

He is a veteran of more than 30 years of working with electric cooperatives and the federal agency he now heads. He was general manager of Verendrye Electric Cooperative, Inc., Velva, ND, an electric distribution system serving about 8,400 members in six counties in north central North Dakota, since 1967. He joined it in 1963 as an engineer.

Beyer also has served on the boards of several statewide commissions and development organizations in North Dakota and organized a water association that serves 1,400 rural members.

While serving as general manager of Verendrye, Beyer was a founding member of Basin Electric Power Supply Cooperative, Bismarck, ND, a supplier of electricity for 120 distribution co-ops in eight states.

A native and lifelong resident of North Dakota, he has been active in the organization and management of numerous activities to benefit electric cooperative members statewide, and in community and political affairs in his home area of Velva.

Early in his career, Beyer was an application engineer for a consulting engineering firm following graduation from North Dakota State College of Science in 1958. Beyer served a four-year enlistment in the U.S. Air Force during the Korean conflict.

He and his wife, Pat, are the parents of two daughters, Wanda, who is married, and Janelle, and a son, Jonathan, and have two grandchildren.

MAUREEN A. KENNEDY

Maureen A. Kennedy was appointed Acting Administrator of the Rural Housing and Community Development Service (RHCDs) in January 1995.

The agency was created in a reorganization of the U.S. Department of Agriculture (USDA) in October 1994 and includes programs previously administered by the Farmers Home and Rural Development Administrations.

RHCDs housing programs have an annual total program level of approximately \$3.1 billion which provides new or improved housing to more than 65,000 rural very low-, low- and moderate-income families each year. The community facilities program has an annual loan authority of approximately \$250 million which assists local communities finance the construction or improvement of fire stations, libraries, hospitals, health clinics, community buildings or industrial parks.

Ms. Kennedy, with broad experience in rural housing and economic policy, most recently had been Deputy Assistant Secretary for Policy Development in the Office of Policy Development and Research of the U.S. Department of Housing and Urban Development. She co-managed the USDA transition team, and for a brief period worked at the White House on USDA personnel issues.

In the early 1990's, Kennedy ran the Aspen Institute's Rural Economic Policy and State Policy Programs, which focus on economic development policy at the Federal and State levels, respectively. While there, she managed grant making for the Ford and Kellogg Foundations particularly in the areas of rural poverty, telecommunications, microenterprise, group lending, state development finance, community planning, flexible manufacturing networks and other innovative development tools.

Ms. Kennedy has extensive advocacy experience at the State and Federal levels. After leaving graduate school, she worked with Rapoza Associates, a consulting firm specializing in rural housing, the low-income housing tax credit, and rural policy and appropriations. In the early 1980's, she served as director of the Alaska Public Interest Research Group, a Statewide citizens' organization, and was an advocate on housing, development and utility issues before the legislature.

Earlier, Ms. Kennedy worked in rural Virginia and the Washington area as an organizer on housing and poverty issues. She is a graduate of the Kennedy School of Government's Public Administration Program and Mount Holyoke College.

She and her husband live in Burkittsville, Maryland, with their two children.

DAYTON J. WATKINS

Dayton J. Watkins, a businessman, financial manager and public sector administrator, is currently the Acting Administrator for the U.S. Department of Agriculture's Rural Business and Cooperative Development Service. Dayton Watkins has a wealth of experience in financial, administration, management, housing and community development and small business development.

Watkins has more than twenty (20) years of experience in management and administration, in both the public and private sectors. He has extensive experience in real estate project finance and development, business and organizational financial management, accounting and budgeting and small business development. Before his present appointment, he served since June 1993 as Counselor to the Administrator of the U.S. Small Business Administration (SBA), after having served from January 1993 to June 1993 as Acting SBA Administrator. At SBA, Watkins participated in developing policies to streamline the agency, developed comprehensive budget strategy, proposed regulatory changes in programs such as the Small Business Investment Company (SBIC), minority business development, Federal opportunities and contracting, Federal small business procurement and worked to maintain the agen-

cy's effectiveness, responsiveness and efficiency in serving the needs of small business communities including, minority and women-owned businesses.

From 1990-92 Watkins was the Acting Deputy Director of Program Operations in the District of Columbia's Department of Housing and Community Development, where he was responsible for the management of financing programs for new single and multi-family housing rehabilitation and construction, a real estate portfolio valued in excess of \$300 million, sale and development of commercial properties on city-owned land, and many other real estate community development activities. During this period, his operating budget was in excess of \$100 million annually. He also served in other positions in that Department, including General Manager of its Bureau of Real Estate from 1986-90 and Executive Assistant to the Director from 1984-86.

Watkins also held other key positions in the District of Columbia Government. He was chief of the Real Estate Taxation Division in the District of Columbia's Department of Finance and Revenue from 1982-84, after having served as that Department's Comptroller from 1980-82 and its Assistant Treasurer/Cash Manager from 1978-80.

Watkins' private sector experience was in working for small businesses as principal in a small Washington, D.C. accounting firm, beginning in 1987, and in a family-owned investment management and advisory firm in Washington, D.C., beginning in 1976. He served as an academic advisor at the University of Maryland from 1976-78, after having held management positions at area financial institutions from 1974-76. He worked as an economist in the U.S. Department of Transportation from 1972-74.

A native of Spotsylvania, Virginia, Watkins holds a B.A. degree in economics from Howard University in Washington, D.C., a B.S. degree in accounting from the University of Maryland in College Park, and an M.A. degree in management and administration from Central Michigan University, Mt. Pleasant, Michigan. Watkins is currently completing work on an MBA degree in business finance and procurement from Mount Vernon College in Washington, D.C.

USDA REORGANIZATION

Senator COCHRAN. The first subject I would like to address is the reorganization and consolidation of offices. It disturbs me that additional funds are requested in the budget for salaries, staff, and expenses in connection with this consolidation.

One of the reasons why Congress authorized the administration to proceed with this program of streamlining and consolidation was to save money, not to increase the costs of the operation of the Department of Agriculture.

How can you justify these additional requests?

Mr. DUNN. Mr. Chairman, those are one-time requests in most cases. We do know that it is going to cost us a considerable amount to do the collocation that we have targeted for reorganization. It will also have to pay relocation costs if we have to relocate a number of personnel.

And we will have to tool up and make some technological changes to ensure that we will be able to satisfy the needs of rural America in the future.

In the long term, however, we are now estimating that our total savings in the reorganization will be over \$4 billion as opposed to the little over \$3 billion that we initially had estimated.

Senator COCHRAN. Has any consideration been given to offsetting these additional costs with cuts in spending from other parts of the budget?

Mr. DUNN. I would have to defer to Mr. Dewhurst on that, as I just have my own budget to look at. Mr. Dewhurst.

Mr. DEWHURST. Well, the total budget was built to a discretionary cap that we were given to work within—a total amount of discretionary money for the Department.

By definition, the money that is requested in the budget for some of the increases, like meeting some of these front-end costs of the reorganization, are offset by reduction proposals in other areas of the Department.

So when you look at some of the other areas in research and the Animal and Plant Health Inspection Service, there are a number of agencies where reductions are proposed. That was simply a product of having to meet some of these costs and also live within the spending cap that the secretary had.

Senator COCHRAN. We may very well be required to appropriate funds this year within a freeze level, the same level of funding for discretionary spending that we have had during this current fiscal year.

If that is the case, it is going to be difficult to come up with additional funds to pay for these increased expenditures for salaries and expenses due to the consolidation of offices.

I would hope that a hard look could be given to some alternatives. We very well may not be able to approve those increases, but, of course, the committee will review and consider this very carefully before we reach a final decision.

I might say that the savings were one of the most highly advertised reasons for engaging in this reorganization. The administration was talking about how it would save money and make the department more efficient.

I am glad to hear of the \$4 billion projected savings. But I presume that is over a long period of time. I would hope that we could start realizing some savings at an earlier date, maybe earlier than current projections indicate.

One other area of particular interest to me: I note in your testimony and in your statement to the committee that you talk about this performance partnership initiative whereby you propose to consolidate, in effect, the funding of 14 different programs into three funding streams. State directors would be given the authority to transfer funds within those 14 accounts, in consultation with State government and local officials and others, to try to meet the needs of individual communities.

I do not know that this proposal is authorized by law. I know that the Department would be required to follow applicable reprogramming procedures if this proposal were authorized and implemented.

You mentioned walking off into an area here where you were running right up against the intent of Congress in defining program authorities and providing specific amounts of moneys to carry out those programs.

If you want to change the funding priorities or if you want to allocate funds for one program that have been appropriated for another, you have got to let us know about that and consult with this committee.

I mean, if we are going to turn these programs into a block grant, I do not know why the administration is criticizing Congress for coming up with some block grant suggestions.

This administration has made a big deal out of criticizing certain congressional proposals for block grant programs.

Here you are proposing to engage in one. It may be that this is a good idea. But, it seems to me that we have got to consult beforehand. You have got to observe the letter of the law to reprogram funds that the Congress may have previously appropriated for specific purposes.

Do you see any problem with that?

Mr. DUNN. Mr. Chairman, your point is well taken. This would, in fact, require legislative change. And before that, we would present to you legislative language and work with you and your committee to look at how to do this reauthorization of that money, budget authority.

And it appears to us that what we are proposing here under this is really a compromise, if you will, of a pure block grant to State governments, taking the best features from existing programs and block grants to develop a program that meets all of the objectives of both.

This would allow the oversight from the various authorizing committees and appropriations committees to ensure that the funds are utilized for what the authorization or appropriation is for.

It would allow a greater latitude by the State directors to address particular needs of their individual communities.

What we find time and time again is communities are stuck identifying a need, a hurdle that they need to get over. And we are not able to do it either because of a legislative barrier or because of a regulatory barrier.

And this does allow greater latitude for that but still has that oversight of the authorization appropriations committee.

RURAL RENTAL HOUSING PROGRAM

Senator COCHRAN. Included in this proposed initiative is a suggestion that the rental housing program be a part of this new partnership arrangement. Does this mean that the administration will seek reauthorization of the 515 Rural Housing Program?

Mr. DUNN. Yes, Mr. Chairman; we will seek reauthorization of the 515 Program.

WATER 2000 INITIATIVE

Senator COCHRAN. What about the Water 2000 Initiative? Is that part of this partnership proposal too? Tell us a little bit more about that.

You mentioned the Department's Water 2000 Initiative in your written statement. What increases are proposed for this initiative in the next fiscal year?

Mr. DUNN. Mr. Chairman, we are just on the cusp of our Water 2000 Program. And to more thoroughly address that, I would call on Administrator Beyer to answer your question.

Mr. BEYER. Thank you, Mike.

Mr. Chairman, the water and wastewater programs are proposed in the Performance Partnership Program, as you noted. There is about a \$90 million increase in the grant program over this current fiscal year 1995 for the Water 2000 Program.

We are in the final stages of drafting a plan to implement that program which includes the leadership at the local level. The State director—each State director, along with the water folks in the

States, will be responsible for delivering that program, the Water 2000 Program in each of the States.

We are going to launch it with a more detailed assessment of where the unserved folks may be in each State. That is one of the principal parts of the Water 2000 Initiative, to provide water, clean water service to all of the unserved folks in this country.

It is estimated by—we have used census data to estimate about 400,000 homes that are unserved, which equates to about 1 million people in this country.

So, we are just about ready to launch the plan. And the State directors and the water folks in the States will be responsible for delivering that program.

Senator COCHRAN. Let me ask you a related question. There was a group in my office here yesterday from my State of Mississippi talking about a difficulty that they had encountered.

One of the local municipalities, in its expansion efforts, had run into an issue of who is responsible for providing water to the residents of the annexed area. The rural water system which serves the area proposed for annexation had the responsibility and loans owed to the Farmers Home Administration.

I do not know exactly what the details of the problem are yet. We are looking into that, trying to help them resolve this problem.

But they said it was unusual that—that the usual experience had been in other cases in this county that problems associated with assuming responsibility for current loan repayments had been worked out without much difficulty. But in this one instance, they were having a hard time resolving the issues.

Is there any kind of mechanism in place, or do we need language in our committee report, or do we need legislative language in order to help push the parties to reach an agreement? Or, is this like the baseball strike?

Are we just going to have this forever gridlocked with nobody giving in? Have you had similar experiences? And what do you recommend to the local folks in Desoto County, MS, about how they ought to proceed?

Mr. BEYER. Well, Mr. Chairman, this will not be like the baseball strike. Trust me. We want to work with you on this problem. We are aware of it.

In fact, we had some communications with your office last November on this issue. It is a jurisdictional issue in Mississippi that we are just getting into ourselves. And we want to help the folks in Mississippi and work with your office in coming to some resolution to this situation.

Around the country, we occasionally experience a rural system that just does not want to cooperate with their neighboring community. And as you know, you get into local spats.

We certainly want to work with the local folks and with your good office to come to some resolution.

Senator COCHRAN. My staff has now handed me a copy of a letter written by Stephen Hart, Director of Legislative Affairs in November 1994, suggesting some legislative language to amend the Consolidated Farm and Rural Development Act to allow a public body to annex an area containing a water and/or waste disposal facility financed by the RDA.

And the letter says the language would remove a legal barrier to annexation created by a provision of current law when certain conditions are met and still provide protection for the financial interests of the Government.

Is that the last thing in your file on the subject that you are aware of?

Mr. BEYER. That's correct. Mr. Chairman, in addition to that, our people have met with those folks. I think it was on Monday that a number of them were in here for the NACO meeting.

And we have met with them again. And this is an option thing that we could probably work with. We may not need a change in legislation. I really do not know at this point.

Senator COCHRAN. The administration, then, as I understand it, would support a change to help resolve these issues in the future.

Mr. BEYER. That is correct.

EZ-EC INITIATIVE

Senator COCHRAN. Thank you very much. One other area that is of parochial interest to me is the Rural Empowerment Zones and Enterprise Communities Program.

As I know the Secretary is aware, the administration has identified three rural empowerment zones and 33 enterprise communities around the country.

This program is intended to help develop their economies and infrastructure to help combat poverty and other economic problems that have confronted these communities.

What I would like to know is: What is the status of that initiative around the country? I know there is a delta empowerment zone that was identified in Mississippi. What is the status of that particular program? What can we expect to happen?

Is this just a promise that something good is going to happen in these communities? And, if not, what is specifically about to take place in these enterprise zones?

Mr. DUNN. Mr. Chairman, you are correct. We are just getting underway. We had some rather fierce competition for these empowerment zones.

And I would like to emphatically state that anyone who submitted an application, whether they were chosen or not, they were not a loser, because just going through the experience of the various communities working together, looking at their problem, trying to come up with some solutions to those will help us in rural development.

In addition to that, we intend to give—work extra hard with those particular communities to use our normal programs to fund their activities.

I am going to ask our Administrator for Rural Business and Cooperative Development Service, Dayton Watkins, to answer your specific question. Mr. Watkins.

Mr. WATKINS. Thank you.

Mr. Chairman, you are correct. We have 33 designated empowerment zones and enterprise communities.

The status right now is that we are moving very aggressively to assist the communities in finalizing their memorandums of agree-

ment and benchmark requirements as required in the program legislation.

Our State directors are the points at which the contacts with communities have occurred. And we are working aggressively with them to reconcile any differences that we have with regard to those agreements.

As you very well know, the communities were actively involved in the development of their strategic plans.

And in those strategic plans, they have specifically indicated things that they think are necessary in their communities that they want to go forward with, that they believe will create sustainable economic communities for their States, their local communities and for their local residents.

There are many Federal agencies that are involved in the EZ-EC Program. We all have responsibilities.

As you know, the Department of Agriculture is the lead agency for the rural EZ-EC Program. All of the agencies within the Department have a significant role to play.

We do expect that there are going to be significant accomplishments through this program. One of the major problems that rural communities have had is that the economic activity that they have wanted to become involved in has been very costly, while the Government is not able to finance the total economic development activity that is going to occur in EZ-EC Program.

Communities, with the Federal resources that are going to be made available, are able to go out and leverage those resources with the private sector, with local foundations, with national foundations, with nonprofit organizations, and with local businesses within those communities.

As the Under Secretary has already indicated, there was fierce competition for participation in the program. We had over 227 applications. Even though it was a difficult process, we were able to choose 33 of what were considered to be the best of that lot.

We are moving forward, as I have indicated. There are some hurdles that we have to overcome between now and the next 30 to 60 days.

We have a strategic plan that is developed that way. And we expect to make significant accomplishments over the next 90 days.

Senator COCHRAN. I appreciate getting that report. It is certainly a matter of great anticipation in our State to see how these funds are going to be made available and what kind of program initiatives are going to flow from the designation of this empowerment zone.

We have high expectations. And I hope that we do not disappoint the folks with dragging out the process or having so many complicated procedures that have to be followed that the moneys never get down there on the ground to be used for the purposes for which they were originally authorized and appropriated.

APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS PROJECT

Let me ask you something about rural technology transfer. In your testimony, Mr. Watkins, you mentioned a rural technology and cooperative development grant program.

You say that there is \$1.3 million earmarked within that program for something called the appropriate technology transfer for rural areas project. We cannot find where any program like that is authorized.

What is that program? And under what authority are you proceeding to have a grant program that has neither been authorized or funded by this committee?

Mr. WATKINS. Mr. Chairman, the program was, to my understanding, originally authorized in 1993. It was previously administered by the Extension Service of the Department of Agriculture.

In going through the reorganization, it was determined that this was more of a rural economic and community development program and, therefore, it should be transferred to the Rural Business and Cooperative Development Service of the Department of Agriculture.

There are currently ongoing agreements that are out there. There is an organization that is currently providing technology transfer assistance in the country. They are very busy.

They have provided some very detailed and technical assistance to many, many Americans around the country.

I think the bulk of their contact or activity is actually with farmers who are interested in knowing better ways of farming, better ways of reducing their farming/operating costs.

For instance, if a farmer is expending a large portion of his operating funds on fertilizer, a farmer will contact this organization and ask if there was some other way that he could actually fertilize his soil besides using chemicals and expending large portions of his operating funds.

And through this organization, we can provide him with some alternatives. Much of the information that they share is information that is coming directly from the Department of Agriculture, through our research programs.

Other information is coming from other nonprofit groups that are involved in not just farming technology transfer, but in business creation, alternative uses for agricultural opportunities, and for opportunities for farmers to diversify their farming activity and to move into other areas.

DIRECT BUSINESS AND INDUSTRY PROGRAM

Senator COCHRAN. Another program that strikes me as the same as an existing program is one you talked about in your testimony—a new \$50 million Direct Business and Industry Loan Program.

To my knowledge, the administration has not submitted any legislative proposal to authorize this new program. Do you consider it already authorized under current law?

Also, do you intend to target these funds to borrowers who cannot get credit through the other Federal lending programs previously administered by the Farmers Home Administration?

Mr. WATKINS. Mr. Chairman, it is my understanding from my staff here that the Direct Business and Industry Program is, in fact, already authorized. It is not a new program. It is just that it has not been funded for a few years.

And so we are not asking for new authority or new legislative authority. It already exists. The program is just not funded.

The reason we are asking for it is that oftentimes, through the business and industry guarantee program, a business entrepreneur does not qualify for the stringent underwriting that a financial institution has in terms of its obligation to us to finance fundable, financeable deals. And so, what we would like to do with the direct program is to be able to, one, write down the interest on a business opportunity to make that deal more financeable and to also reduce the interest rate that that entrepreneur may, in fact, incur if he were able to get financing by some other means.

RURAL TELEPHONE BANK

Senator COCHRAN. In the budget proposal, there is an assumption that the Rural Telephone Bank, Mr. Secretary, will be fully privatized in the next fiscal year. There are no appropriations requested for the bank's loan programs or its administrative expenses.

In the current fiscal year, \$770,000 was appropriated in subsidy loan costs and \$8.79 million was provided for the bank's administrative expenses.

Do you think it is realistic to assume that full privatization of the bank will be achieved in this next fiscal year and that no phaseout of the program is required?

Mr. DUNN. Mr. Chairman, we have been meeting with the Rural Telephone Bank board and meeting with the private members of that particular board. But to answer your question more in depth, I will call again on Mr. Beyer who is the Administrator of the Rural Utilities Service.

Mr. BEYER. Mr. Chairman, the proposal is to privatize the bank as you see it under about three principals: No. 1, to make sure that the privatized entity has a strong balance sheet and can access capital markets on its own, and that it will be truly owned and controlled by the borrowers, the private sector; No. 2, at no cost to the Government; and No. 3, to meet the goals of this administration's efforts in privatizing functions that can be served by the private sector.

We have been working, like Mr. Dunn indicated, with the borrowers, the Rural Telephone Bank board themselves, and with OMB, and are, in fact, preparing legislation for this committee and the authorizing committees to consider. We have a target date for April in presenting legislation to accommodate that.

Senator COCHRAN. There are some specific requests in the budget for legislative language. One example is to permit the retirement of the bank's class A stock that remains after the transfer of the equity fund balance.

Another provision of law that is suggested has to do with establishing a new formula for determining interest rates charged to Rural Telephone Bank borrowers and the repeal of certain provisions of the Rural Electrification Act.

Has this been submitted to the legislative committee as a proposal, or has a request for this legislation come to Congress, or is this the only vehicle that we have for suggesting the legislation? Do you know?

Mr. BEYER. A legislative proposal will be submitted to accommodate this.

Senator COCHRAN. So the budget is assuming that——

Mr. BEYER. The budget is assuming that it is——

Senator COCHRAN. It will be enacted.

Mr. BEYER. That it will be enacted. That is correct, Senator.

ALCOHOL FUELS GUARANTEE LOAN PROGRAM

Senator COCHRAN. Let me ask you: Is the Alcohol Fuels Guarantee Program under your jurisdiction? There is a rescission proposal in the House.

You were talking about the rescissions, Mr. Secretary, a while ago. There is \$9 million currently available for the Alcohol Fuels Guarantee Loan Program.

I understand that the funds are available through fiscal year 2009 under existing authority. There has not been any funding obligated in any fiscal year since the appropriation was made in fiscal year 1993, from then to the current date. Is there any justification for keeping this fund available?

It may very well be that the House is right, that we could rescind that and nobody would ever know the difference.

Mr. DUNN. Mr. Chairman, those funds have been carryover funds. And they do seem to have been there for some time.

I will, again, turn to our Administrator for Rural Business and Cooperative Development to give you the latest update on what activities we have had in that particular area.

Mr. WATKINS. Mr. Chairman, the program was authorized in 1993. Since the authorization, we have not had an emergency declared by the Secretary of Agriculture whereby those funds could be utilized.

However, because we are not sure of when an emergency could occur, we think that the authority should remain. The program provides loan guarantees to purchase grains for production of alcohol fuel to meet contract delivery obligations.

And like I said, fortunately there has not been an emergency declared. And so the program has not been used.

We do not know what the future has for us. So we think that they should be maintained as they are.

RURAL RENTAL HOUSING PROGRAM

Senator COCHRAN. Another program the House has identified for rescission is the 515 Rural Housing Program. I wonder whether or not you see any legal impediments, because the law provides that no funds shall be made available for loans made after September 30, 1995.

Despite that, we understand the general counsel has said that funds appropriated for this fiscal year for this program may be obligated, never mind the existing statutory language.

What is the status of the 515 Loan Program in terms of obligation of funds and whether or not you support the rescission of the \$115 million that the House has approved for this program?

Mr. DUNN. Mr. Chairman, you are correct that the program was not reauthorized and that we are assuming authority under the appropriations.

And to give you a more indepth background on that, I will call on Maureen Kennedy, the Acting Administrator for the Rural Housing and Community Development Service.

Ms. KENNEDY. Thank you, Senator. I want to start out by emphasizing that there are two separate issues here.

One is the question about the authority to operate the program, and the other is the rescission. These have been on two very different tracks over the course of the last 6 months.

So while there might appear, from an outsider's point of view, to be some coincidence here between our conclusion that we have the ability to go ahead and expend funds and the rescission, that really is not the case.

Back in October we began to analyze our ability to operate. And during the course of the fall, it became clear that there was disagreement about that issue.

In early February, we got all of the parties in the room. Our general counsel at USDA heard about 2 hours' worth of conversation on exactly this issue. And the conclusion that he drew was that we did, in fact, have authority to operate the program.

I came on board a couple of days later, officially on February 6. We put together a funding notice, made the remaining policy decisions about our allocation of funds and proceeded, starting the week of February 21, to expend money consistent with OMB's then-current allocation schedule.

A day or two later, the House took its initial action at the subcommittee level to propose a rescission of the program.

At this stage, to answer your question about what the status of the program is, we have received a new allocation schedule from OMB, the purpose of which was to assure the Congress that we are planning to expend funds consistent with the authority that we believe we have, on a schedule that is consistent with our activity during the course of last year.

Again, we are not intending to attempt to spend all of the money in the next couple of weeks, if it were the case that the Congress were to decide that the rescission should go forward and the President signed off on that.

LOCAL TECHNICAL ASSISTANCE AND PLANNING GRANT PROGRAM

Senator COCHRAN. What about the Local Technical Assistance and Planning Grant Program? I notice the House has proposed a rescission there as well. I think that comes under Mr. Watkins' jurisdiction. It is a \$1.75 million item that was appropriated last year. It was the first time it was funded.

According to testimony here, you are completing regulations for the administration of the program. If you have not finished writing the regulations and implementing them, how are you going to spend the money that is already appropriated?

Here we are, midway through the year. Why not go ahead and rescind these funds and then start over next year and look at it again?

Mr. WATKINS. Well, Mr. Chairman, you know, you are correct. We were authorized these funds in fiscal year 1995. We are currently completing the writing of the regulations.

But it is not just the local technical assistance and planning grant regulations that we are rewriting. We are rewriting every regulation that we have in the Rural Business and Cooperative Development Service.

And we have reduced 50 percent of those regulations, making our program customer friendly, simpler, and easier to operate and be used by local customers.

We think that we need this program in fiscal year 1995 because we are going to publish the regulations. That is No. 1. No. 2, the communities are in such dire need for the services that we will have the ability to provide them through the use of these funds.

And as you have indicated, there is only \$1.75 million. It is not a lot of money. But we expect to use it throughout the country. We are going to use these funds providing technical assistance to the local communities in rural areas to build capacity in terms of their economic development activities.

We think that it is very appropriate and necessary that we begin this process in 1995. We will have those regulations in place, hopefully, very soon. And we do expect to obligate and expend those funds.

Senator COCHRAN. Thank you very much.

I am now going to recognize the distinguished Senator from Arkansas, Senator Bumpers, for any questions or comments that he might have of the witnesses.

AARC PROGRAM

Senator BUMPERS. Thank you, Mr. Chairman.

I want to ask Mr. Dunn about the AARC Program. That has been cut in the House from \$6.5 million to \$3.5 million. Is that correct, \$6.5 to \$3.5 million?

Mr. DUNN. Senator Bumpers, there is a proposal for rescission in the House to cut \$3 million out of the fiscal year 1995 AARC Program.

Senator BUMPERS. What was the President's request for AARC?

Mr. DUNN. The President's total request in fiscal year 1995 was \$6.5 million, Senator.

There were some carryover funds in the AARC Program. And that is roughly the equivalent of those carryover funds.

Senator BUMPERS. That has been a fairly popular program with some of the members on this committee.

ATTRA is under a separate research project. Which one is that?

Mr. DUNN. Just a moment. Just a minute. I will tell you.

Senator BUMPERS. That is the rural technology and cooperative development grant, is that it?

Mr. DUNN. Yes.

Senator BUMPERS. How long have you been with the Department, Mr. Dunn?

Mr. DUNN. Senator, this is my second go-around. I was a Midwest director for Farmers Home under the Carter administration, and came on board with the Clinton administration, and was confirmed as the Farmers Home Administrator on November 30 of last year.

And now, I have the unenviable job of filling the shoes of your good friend, former Under Secretary Bob Nash, who has done a tremendous job in this position and——

Senator BUMPERS. I was really saddened to see Bob leave to go to the White House. I liked him a lot better at the Department of Agriculture. [Laughter.]

RURAL RENTAL HOUSING PROGRAM

Ms. Kennedy, apparently the 515 Program is on the chopping block, is that correct?

Ms. KENNEDY. Yes, Mr. Senator; it has been——

Senator BUMPERS. Give me your view on how well that program has worked.

Ms. KENNEDY. Well, let me start out talking a little bit about——

Senator BUMPERS. Have you been over the 515 Program?

Senator COCHRAN. We asked a question about it, but not that question.

Ms. KENNEDY. Yes; we talked a little bit more about the authority to operate the program. Let me start out by talking about the need for the program because I think that is where we ought to start doing the analysis.

At this stage, we have about 1 million rural residents still living in substandard housing throughout the country. There has been tremendous improvement in the quality of housing in rural America. But there is still a tremendous need for standard housing in small communities across the country.

In addition, there are several million other rural residents who are paying significantly more than the 30 percent of income that one would expect residents to be paying toward their rent or their debt service payment.

So I think that there is no doubt that there is a tremendous need for the program. The program has been in operation for over 20 years.

And it has built almost one-half million units across the country. A tremendous number of those are, in fact, in the southeastern part of the country. And the vast majority of those units are in very good shape. The developers are doing very well in operating them. And tenants are being served very well by the program.

Before I came to this job about a month ago, I was over at HUD as Deputy Assistant Secretary for Policy. And I just want to clarify that there is a very distinct difference between the problems in the project-based portfolio over there, and the problems that we do, in fact, face with the 515 Program here.

We did an analysis last year, under Mr. Dunn's leadership, and took a look at every single project we had across the country that was more than 5 years old. That is about 70 percent of the portfolio. This analysis was conducted between March and June.

Based on that analysis, we identified a little less than 10 percent of the portfolio that had either health and safety violations that potentially could threaten tenants living in the units, or had significant deferred maintenance problems, or had civil rights problems.

And we have put those developments on a very strict schedule in terms of providing the rehabilitation and other kinds of resources that we need to turn those developments around.

All of this is not at all to say that we do not have some structural problems in the program that make it vulnerable.

Since I have been here at the Department, I have been paying very close attention to the work coming out of the Inspector General's Office, the General Accounting Office, out of the Congress, particularly the information coming out of Mr. Durbin's activity last year.

The first trip I took, on an official basis, was to Mississippi to take a look at the portfolio down there and to see, firsthand, what the problems were, as well as the great strides that the State has been taking.

We have taken over 100 actions from an administrative point of view over the last couple of years to put in place measures in the program to reduce fraud and abuse; to ensure that we do not have the kinds of identity-of-interest problems that have cropped up in the program over the years; to ensure that we, in collaboration with the State housing finance authorities, are ensuring that an appropriate amount of return to the developers is being made; that between the tax credits that are available through the State HFA's and the resources that we provide to these individual developments, that there is not an inordinate amount of profit being gained by the developers. We have a ways to go.

There was legislation that was proposed as a part of last year's housing bill that we were sorry to see not make its way through the Congress. And as I understand it, most, if not all, of that legislation will be proposed in this year's housing bill, presuming one goes forward.

So I guess my bottom line is that there is no doubt that the program has had problems in the past. I think we are in good shape. We recognize exactly what those problems are. We have got a very good sense of them.

We are putting into place a loan classification system this June. I believe that you cannot manage what you cannot see. And so we are trying to make sure that we, as well as our State directors who are responsible for implementing the program, see exactly what the problems are and are able to address those.

Senator BUMPERS. Well, I heard all of that last year about the problems with that program. And of course, you know, I recognize that things are going to be quite different this year given the budget constraints. But that program has not been a problem in my State.

Ms. KENNEDY. Yes.

Senator BUMPERS. It has been a terrific benefit.

Ms. KENNEDY. Yes.

Senator BUMPERS. My own hometown, which is just a small, rural community, has benefited greatly from it. They did not think it would work there.

They started out with 12 or 24 units. But within 3 years, they have doubled it. And they still have a waiting list.

Ms. KENNEDY. Yes.

Senator BUMPERS. So——

Ms. KENNEDY. Well, just to follow up on that, Senator Bumpers, there are a couple of States—there are several States across the country for which the program has been problematic.

Senator BUMPERS. I understand.

Ms. KENNEDY. And that includes Senator Cochran's State. And so our energies will be focused, have been focused, in particular, on those States as well as the problematic problems that cut across the entire program.

Mr. WATKINS. Senator Cochran?

Senator COCHRAN. Go ahead, Mr. Watkins.

APPROPRIATE TECHNOLOGY TRANSFER FOR RURAL AREAS PROJECT

Mr. WATKINS. If I could, I would like to go on the record to correct a statement that was made earlier. You were asking the Under Secretary about ATTRA in your discussion about AARC.

And, unfortunately, you moved so quickly from that to the 515 Program, I did not have an opportunity to respond. I would like to do that now.

I earlier told the chairman that the appropriate technology transfer for rural areas project was authorized in 1993 when, in fact, it was authorized in the farm bill of 1985. It was funded in 1987.

It was initially administered by the Extension Service of USDA, then subsequently transferred to the Department of the Interior. Through the reorganization that has occurred at USDA, it has been transferred back to the rural economic and community development mission area.

And it is currently housed or will be housed in the Rural Business and Cooperative Development Service, which is my administration. Under the Rural Technology and Cooperative Development Grant Program, \$1.3 million is earmarked for ATTRA.

I just wanted to correct that.

AARC

Senator BUMPERS. That is fine. I also wanted to highlight the AARC Program.

AARC, as you know, comes here every year. And the chairman will remember this. They have all of these products that they have worked on the preceding year.

And Senator Harkin, Senator Conrad, and others think this is a great program, that we are getting products from agriculture that we simply would not be getting if it were not for AARC.

And so to cut that program in half—I do not know. It may be justified. I do not know.

Some of the things they have come in here with, looked fairly impressive. Some think that you can apply these products so that they are going to make a difference in agriculture and farmers' lives, I just do not know.

Cutting the program in half does not torpedo the program, I guess. It will just cause them to be maybe a little bit more parsimonious like the rest of us are going to have to be.

Mr. DUNN. Senator Bumpers, in case I was not clear, let me unequivocally say that we would be opposed to cuts in AARC, rescission in AARC. Like you, we feel that the potential for that program is tremendous.

In rural America, we have one great asset: And that is the men and women and the soil they work. And AARC provides us an op-

portunity to optimize both. And we support you in your contention that this is a program that needs an opportunity to prove itself.

MISSISSIPPI DELTA ASSISTANCE

Senator BUMPERS. Mr. Dunn, in your opening statement you said that we have seen improvements in focusing our program resources to areas that have experienced pervasive poverty. And those areas include the Mississippi Delta.

Could you give us some illustrations of how you focused your resources in that area?

Mr. DUNN. Senator, probably a good example of that was the EZ-EC initiative that the President has proposed. And we talked earlier about how the EZ-EC Program is working.

But practically the entire delta area submitted applications of some shape or form, I believe, in EZ or EC. And that tells us that those communities are now beginning to work together.

It is, I think, an outgrowth of what came from the Delta Commission. And we have been supportive of that program in the past.

And there are no losers even though they did not receive an EZ or EC designation, because we have directed our State directors to refocus on those particular areas, pockets of poverty, those areas that need the greatest help.

Helping those communities to use their resources, both human resources and fiscal resources, as well as what Federal resources we have, this administration believes, is the way to ensure that we have long-term sustainable development.

Senator BUMPERS. Senator Cochran, Senator Lott, and Senator Pryor, the President, all of us have spent a lot of our efforts, I should say, ever since we have been in public office doing everything we can to address an area of our respective States where there is pervasive poverty.

And things are better there. They are better on the Mississippi side. I know. And Tunica County is not only not the poorest county in the United States; it is rapidly becoming one of the more prosperous counties in the United States.

Yesterday, the homebuilders came to my office, and I was looking at the number of homes that were permitted to be built in my State last year. In the northwest corner of the State, you know, some counties had 2,000 or 1,500.

But when you get out onto the delta, one county did not build a single new home last year. And one built one. One built three. One built 11.

So we still have a long way to go to redress the problems there. My commitment to that area is as strong now as it has ever been.

Do you want to comment, Mr. Watkins?

AARC/MISSISSIPPI DELTA

Mr. WATKINS. Yes, Senator; you know, in your discussion earlier before you moved to the delta, you talked about AARC. AARC—the Director is here, Mr. Bruce Crain—is a sister entity to rural business and cooperative development.

And I do not particularly want to talk about them for Mr. Crain, although I do want to talk about them from the perspective that

what AARC does is complementary to what we do in the Business and Industry Program. And so the need is tremendous.

And I say that in context to the delta, the middelta area, because what AARC is doing, similar to what we are doing with the Business and Industry Program, is taking agricultural products that can be commercialized and that can be transferred into a business activity by a business entrepreneur who needs financial assistance in the form of venture capital funds.

And as you may recall, I came from the SBA before I came over to the Department of Agriculture. And the Venture Capital Program is a Small Business Investment Company program that has been a tremendous success in this country.

Well, AARC is a very similar entity. AARC invests equity positions in companies that are going to build business activities in rural America.

Through Bruce Crain's vision, he is encouraging businesses to establish themselves in the most poor communities within the United States, including the delta area.

And so I certainly go on record in support of AARC; I know he would if he could get the opportunity to speak here today; I support the administration's request for maintaining AARC's funding, because the Small Business Investment Company programs do not devote their resources in rural America to a large extent. AARC does.

I think that taking businesses into rural America will be enhanced by AARC's continued existence and funding.

And clearly, they probably need more funding because there is more equity financing and venture capital financing needed in rural America to encourage entrepreneurs to take business activities to the middelta.

Mr. DUNN. Senator, we understand the concerns that you have on the delta area.

And that is why we believe how we have reorganized the Department and by targeting our resources, we can systematically go through and improve those commissions, providing the job opportunities to business, getting the—making sure we have the infrastructure, water, sewer, electric, telephone there, and then the housing.

And we have to have that base to work on. And we are also doing some other unique things to ensure that we have housing in those particular areas.

And I would ask the Acting Administrator for the Rural Housing and Community Development Service to talk about our set-aside programs.

SET-ASIDE PROGRAMS

Ms. KENNEDY. Before I talk about the set-aside, let me just emphasize that RECD has, as part of its performance goal process for 1995, required that each State director identify target areas in his or her State.

And I can assure you that for the States in the delta, each of those State directors has identified those communities as ones that he or she is intending to put a priority on.

Of course, we have our priority point system that we operate under. And that, certainly, would continue to rule.

But as part of reorganization, we consider ourselves not just to be loan officers processing applications that walk in the door but our job is to do outreach. Our job is to do capacity building, to encourage folks to be putting applications in the queue for analysis later.

On the housing front, in particular, let me talk about two things. One is the set-asides that the Under Secretary just mentioned. Within the 515 Program, we have three set-asides that have the effect of driving money into traditionally underserved communities.

Those include a set-aside for nonprofit activity, which, again, tends to be in underserved communities; the diversity demonstration, which has been particularly effective in Mississippi, and we have gotten several applications that came in from Arkansas as well; and also, what we call the targeted set-aside.

So again, there is that nice linkage directly into the State directors' targeted communities.

I have to point out though that we will have difficulty ensuring that those targeted set-asides will end up in the communities that we are all concerned about if the rescission package goes forward. Given the allocation schedule that we have with OMB, the vast majority of those funds become available in July and August.

That is about the point where we would be able to actually implement our targeted set-aside diversity demonstration and nonprofit set-aside programs.

Likewise, on the 502 side, you all probably know better than I that the program level was at \$1.8 billion. We all anticipated that it would be down to \$1.2 billion this year. As a result of a change in the subsidy calculation and credit reform, the actual amount available is \$933 million.

So on the single-family side, we are experiencing, in effect, about a 50-percent cut in program between 1994 and 1995. The President is proposing we increase back up to an effective program level of \$1.2 billion for 1996. But again, that is putting tremendous pressure on communities across the country.

The States that you are talking about, the Southeast, have been particularly heavy users of repooled funds. Every year about August, we take leftovers from all across the country, put them into a pot, and then reallocate them according to the States that have the highest demand for the program.

Because funding across the board is so much lower this year than it has been in past years, we anticipate that there will be much less available for repooling to these States.

And the only final point that I would make is when I was in Mississippi driving from Tunica down to Jackson, I was struck by how much the 502 Program has had an impact on that landscape.

Someone told me that about one in seven housing units built in that part of the delta is there because of 502 financing. And I have not had the opportunity yet to go to Arkansas and take a similar look in your part of the States. But I would imagine that I would see the same kind of effect.

Thank you.

Senator BUMPERS. Thank you.

Senator COCHRAN. Thank you, Senator Bumpers.

SERVICING OF RURAL HOUSING PROGRAM LOANS

Let me ask you one other question about the Rural Housing Program. There has been, in the past, a number of contracts let for people to actually service the loans, collect the accounts that are due and owing.

I know that there have been, from time to time, some serious problems in the collection of funds and delinquencies in these programs.

And, I have a question that I was going to submit to get some statistics for the record about how many of these loans have been written off for principal and interest for whatever reasons over the last few years so that we will have an idea of how big of a number we are talking about.

But anyway, in that connection, some of these privately serviced contracts, I was told, have been very successful in the percentages of collections as compared with percentages of collections of other contracts, but that these were being phased out.

The last one remaining, I am told, is in Puerto Rico, which has been under contract with Farmers Home and its successor agencies since 1984.

During that time, delinquency rates have decreased from nearly 39 percent in 1984 to under 11 percent in 1993. According to the General Accounting Office, the 1994 delinquency rate for the Farmers Home direct loan program was about 29 percent.

Why, if those numbers are true, are you terminating that contract and deciding that the Government can do a better job collecting than these private collection firms?

Mr. DUNN. Senator, we ran a couple of test cases also on South Carolina using these private companies. And what we have found is that it is extremely costly and duplicative to have both those private contractors out there and also Federal employees that have to go out and make the particular loans and be there for any Federal actions that have to take place on servicing those loans.

We also are in the process of doing an escrowing system within the rural economic community development services which will set up a situation that will give us greater servicing capacity on an automated basis to provide for our customers to have an escrow account for taxes and insurance like almost every other mortgage holder has in the world.

We see this as a savings. And we do have a study that has been done by the Department independently that said it was more costly for the Federal Government to go to the private sector. And we would be willing to make that available to you, Senator.

Senator COCHRAN. I would like that for the record, because the information that we have indicates that the collection rate is much greater when the private contractors are out there collecting the money than when the Government is doing so.

LOAN SERVICING IN PUERTO RICO

Well, let me ask you about the staff levels. I would like to know how many new people are you going to have to hire in Puerto Rico to manage these accounts?

Mr. DUNN. And it will be very few, Senator, because as I had indicated before, what we have had there in Puerto Rico was a shadow of the existing agency personnel that we have out there, because we still have to fall back on Federal employees to make the loan and then to take final actions on the servicing of those.

In addition to that, we are looking at those field employees being retrained. We are changing the culture of those field employees so that they are to begin to be more rural development advocates and a stimulus for change in rural communities.

To remove them from those areas would exclude those communities from having those types of advocates in their midst. So we think it would be a net loss.

But again, we will give you an exact account of the number of employees that we have had in Puerto Rico and the number we expect and what their relative cost will be between phasing out that servicing package and going with the Federal employees.

[The information follows:]

PUERTO RICO

As of February 1995, Puerto Rico has 182 employees onboard and is currently in the process of hiring additional employees up to their authorized fiscal year 1995 staff-year ceiling of 196. The annual servicing contract costs have been approximately \$4.3 million. The annual costs to service 29,000 rural housing borrowers using in-house Federal employees are estimated at \$3.9 million, a cost advantage of \$400,000.

Senator COCHRAN. Ms. Kennedy, would you like to add to that answer?

Ms. KENNEDY. Yes; just briefly. Before I came onboard officially in February, I happened to be on vacation in Puerto Rico for a long weekend and stopped into the State office, in part because I knew this was an issue there.

Let me make the point that our experiences with private sector contractors have generally been quite positive. It's not so much that collections have gone up, but that delinquency rates have gone down in a manner that is relatively consistent with the manner in which they have been going down across the country.

The delinquency rate in Puerto Rico is still higher than it is across the country, although it is significantly lowered; and as Mr. Dunn said, we can forward to you specific information on that.

CENTRALIZED VERSUS DECENTRALIZED SERVICING

I think the reason why these experiences have been relatively positive, although very expensive, is because they rely on centralization of the servicing process. Right now, RHCDs operates the rest of its servicing effort on a decentralized basis.

So the real question here in my mind is not so much whether to contract out or do it in-house, but do it in a centralized manner or do it in a decentralized manner.

We are at the point right now where we are in agreement with these private sector contractors that centralization is the way to go. And that is what we are pursuing that through the DLOSS project that we are in the midst of procuring.

So we will be getting all of the benefits out of that private sector experience in terms of reduced cost, increased efficiency, consistency of service across the country.

But based on the cost benefit analyses that Mr. Dunn referred to, we will be doing it at significantly less cost than the private sector would if we were to contract out that centralized servicing approach.

Senator COCHRAN. I appreciate very much having that added insight.

REGULATORY RELIEF

Let me ask you about some regulatory issues. We have before us here in the Congress a number of proposals to provide regulatory relief, to try to cut the cost of compliance with Federal regulations and the like.

To what extent is the Department engaged in making an effort to look at its regulations and see where it can be more sensitive to the cost? I am thinking particularly of the rural electric area, for example.

I know we have to comply with a number of existing laws and EPA regulations and all of the rest. But you probably have regulations of your own that are imposed and promulgated to try to help direct and control, provide guidelines for borrowers to follow.

Is there any effort being made to take a look, to try to reduce the costs or the unnecessary burdens of regulations in that area?

Mr. DUNN. Senator, that is a very integral part of the "National Performance Review" in reinventing Government that President Clinton has directed all agencies to take a look at.

We do not have the choice of reducing our internal regulations by 50 percent. The President has directed us to do so. And we are in the process of doing that at this time.

You heard Administrator Watkins talk about the total rewrite of his regulations and what has gone on there. We have had similar activities in the Rural Utilities Service and similar activities in the Rural Housing Unit as well.

CONTROLS ON DELEGATIONS TO STATE DIRECTORS

Senator COCHRAN. Well, one area that bothered me when Mr. Watkins talked about the proposed performance partnership initiative was that there might not be any restrictions at all. You propose to leave it up to State directors to decide how to spend funds appropriated for these programs any way they want to.

What kind of constraints are you going to have on State directors? You have turned over to them the authority to manage their own staff salaries and expenses of operating those offices.

Are we going to have a situation like the Barings Bank did in Singapore? Is somebody going to be out there breaking the bank, and we will not know about it until it is over?

Mr. DUNN. Senator, you raise a good point. With the delegation of additional authorities are additional responsibilities.

And commensurate with that, we have set about putting together internal review processes in which management will be tightened up. But again, it will be the responsibility of those State directors as well.

We do not intend to totally turn the purse strings over as it may have seemed we were indicating. There will be guidelines. There will be contingent monitoring by the administrators of the individ-

ual programs to see that the moneys are spent as Congress authorized and appropriated.

However, we think we can do it without an excessive amount of reporting and overlapping and duplications of management activities.

One county supervisor told me one time, I count the money. Then my boss comes in. She counts the money. Then the district director comes in. He counts the money. Then the State comes in. They count the money. And then the national office comes in, and they count the money.

Counting that \$1 five times did not make \$5. It was still \$1. We are going to hold those individuals accountable for what they say they are going to be doing.

Senator COCHRAN. I will bet you too, under the budget resolution when it is finally approved by Congress, we will not have \$1 to count. [Laughter.]

CLOSING REMARKS

We are going to have some substantial cutbacks, I am confident, in a lot of appropriated accounts in order to meet the targets of the budget resolution, whatever shape it is going to take. We will be constrained by that, as you all know.

But we will do the best we can to try to allocate the resources that we have available under our allocation, under the budget resolution, in a way that will help meet the needs of those who live and work in rural America and the small towns of this great country of ours, because they do have some special problems just being in areas that, in many cases, are remote and less densely populated.

It costs more to get electricity out there. And it costs more to get rural water, and waste treatment facilities built in those areas.

So, there has to be a contingent Federal role, in my opinion, in order to make life comfortable and to help ensure that job creating activities are attracted to those areas through economic development initiatives.

We have got a lot of responsibilities to continue to meet even with a reduced amount of Federal funds that will be available. We have got to work smarter with local governments.

I think what you said about these enterprise zones is very important for us to continue to stress, and that is the cooperation that is needed, the forging of a spirit of cooperation.

A lot of these Federal programs do that just by their very presence, make people get together and try to solve their problems by working together—business, industry, local governments, Federal agencies, and all of the rest.

It is an interesting challenge. What I see for the future and this year is that we really do have some interesting challenges that we have not had before in terms of lack of resources at the Federal level.

So we have got to work harder to make our limited resources go further and be used more efficiently.

I do not mean, by criticizing some of the things that I have heard this morning, that I am in disagreement with the effort to streamline and make things maybe even more flexible for the local administrators.

But, in doing so, do not forget that these funds are to be used for the purposes for which they were appropriated. You cannot ignore that. You should not ignore that.

We are going to insist that our priorities that are set are worked out in consultation with each other, the Congress and the administration.

We do not want to just dominate the scene. We cannot if we wanted to. The President has got to sign these bills. He might not sign them if we put things in there he does not approve of. So we have to work together in a bipartisan way.

SUBMITTED QUESTIONS

Well, that is the end of my speech. Thank you very much for being here. We will submit additional questions in writing to be answered for the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

DEPARTMENT OF AGRICULTURE
QUESTIONS SUBMITTED BY SENATOR COCHRAN

RURAL ECONOMIC AND COMMUNITY DEVELOPMENT

Question: Secretary Dunn, you indicate in your testimony that the Department has delegated to the Rural Economic and Community Development (RECD) State Directors the authority and responsibility to manage their own salaries and expense budgets. What controls are in place to assure that the total amounts appropriated for these costs are not exceeded?

Answer: In recognition of the fact that State Directors are in the best position to understand the unique needs of their own States, FY 1995 administrative funds were allotted to each State in total in order to give State Directors increased responsibility--and flexibility--in the management of their States' resources. Within the established funding ceiling, State Directors were then asked to review their operations and submit to the National Office a plan of how they intended to use the resources provided to them over the coming fiscal year. Individual State targets for FY 1995 salaries and benefits were calculated separately by the National Office for State monitoring purposes only. The plans were subsequently entered into the Agency's accounting system at the National Finance Center. Funds can be reprogrammed during the year to accommodate changing needs and priorities, and both the States and the National Office are able to monitor spending in relation to the State plans to ensure that ceilings are not exceeded.

As part of the mid-session review process in the next few weeks, National Office staff will be working closely with field staff as State Directors take a comprehensive look at their salaries and expenses plans to ensure that all funds are appropriately allocated and all contingencies are covered.

Question: Secretary Dunn, the prepared testimony you have submitted indicates that revisions will soon be proposed to streamline the Business and Industry loan guarantee program regulations and to make them more user friendly. Could you please be more specific as to the changes you intend to propose?

Answer: The intended effect is to shorten (approximately 50 percent reduction), simplify, and clarify the regulation, shift some responsibility for loan documentation and analysis from the Government to the lenders, make the program more responsive to the needs of lenders and businesses, and provide for smoother and faster processing of applications. The priority system will give increased priority to underserved communities. Specific changes include: (1) provides that production agriculture, when it is part of an integrated production, processing, and marketing business and will not be more than 50 percent of the project or total more than \$1 million, whichever is less, and when such assistance is not available through the Consolidated Farm Service Agency (CFSA), will be an eligible loan purpose; (2) expands eligible loan purposes to include tourism and recreation except for gambling, race tracks, and golf courses; (3) allows loans to foreign owners for fixed assets only when jobs will be created for U. S. residents; (4) provides, in addition to National and State banks, credit unions, etc., for a broader range of eligible lenders to participate in the program, and such lenders, when authorized by a State to conduct lending activities within that State, could include entities indebted to RUS, public bodies, minority small business investment corporations and other entities with adequate financial resources; (5) establishes a certified lender program with limited review by the Agency; (6) allows for refinancing of the lender's existing debt when necessary to provide the borrower with adequate cash flow; and (7) permits

reviews and compilations to be used in lieu of audited financial statements for certain loans under \$3 million.

The lender is primarily responsible for analyzing credit quality and for making, securing, and servicing the loan and monitoring construction. The program will provide for smoother and faster processing of applications. Application processing procedures will be more efficient, less burdensome for borrowers, lenders, and RBCDS staff, and will provide for more rapid decisions through increased empowerment of field staff to work with the public, other Federal agencies, State and local governments. Streamlining of the program regulations and efforts such as automation of application materials, including forms, will enhance the effectiveness and efficiency of the program and provide a high level of customer service.

Question: The prepared testimony indicates that customer service training is being provided to all employees. What is the additional cost of this training, if any? Is an increase requested for FY 1996 to cover this cost? Where?

Answer: Approximately \$2.2 million was set aside from existing funds in FY 1995 in order to cover customer service training for all employees. It is anticipated that all training will be completed this fiscal year and no additional funds are being requested for FY 1996 for this purpose.

PERFORMANCE PARTNERSHIP INITIATIVE

Question: The budget justification includes a proposal entitled the "Performance Partnership Initiative." As I understand it, this Initiative will allow state rural Economic and Community Development directors to shift monies between appropriated accounts. Has the Administration submitted legislative language to the Congress for this initiative? If not, when is it anticipated this will occur?

Answer: Mr. Chairman, the Administration has not yet submitted the legislation for the Performance Partnership Initiative. We anticipate that this will be done in the very near future, perhaps in early April.

Question: What you are proposing sounds like a mini-block granting of these programs. Why not propose one or more block grants in place of USDA's categorical housing, and community and economic development programs, if you want to streamline these programs and allow local communities the flexibility to use them to meet their particular needs?

Answer: Mr. Chairman, we did discuss the possibility of block granting these programs to the states in our deliberations. We decided not to propose a block grant, as such, because most of the programs involved are loan programs for which only budget authority is appropriated. This would reduce the level of assistance significantly. For example, the budget authority requested for the Performance Partnership Initiative is \$988 million which will support a program level of about \$2.6 million. Under a block grant, the states would receive only the \$988 million. The business and industry loan guarantee program with a program level of \$750 million and only \$ 6.8 million in budget authority represents the most extreme example of this difference.

Further, a block grant ignores our strongest asset-the very capable and experienced field staff that delivers these programs. In order to provide the same level of service, the states would be required to replicate this staff and the cost for doing so would in all likelihood come from the program funds. These and other factors convinced us the best way to improve the effectiveness and

the efficiency of the programs is the proposal contained in our budget.

Question: It appears to me that this proposal will allow the agency to circumvent Congressional intent and priorities which are defined during the appropriations process. How do you respond to this?

Answer: Mr. Chairman, circumvention of Congressional intent is not the purpose of this proposal and we certainly will not permit this to occur. We fully anticipate the same types of projects to be funded. We are proposing that RECD be given the authority to transfer up to 10 percent nationally from one account to another in order to better address the needs of the various states. Under the current system of allocating funds to the states, based for the most part on the percentage of rural population and the extent of rural poverty, we twice annually pool the funds of each account that have not been obligated by the states and reallocate based on demand. For example, states may lose funding for water and waste disposal in any one year, and simultaneously have other eligible needs, like community facilities, that may go unmet because there may not be unused community facility funds in other states that can be reallocated to meet those needs. Having the authority to transfer funds from one account to another would enable the state director to better meet the needs of the state and still meet the intent of Congress.

We fully expect funds to flow in each direction as a result of this authority so no single program would be diminished to the gain of others.

Question: The proposal includes programs from all three agencies under the Under Secretary's jurisdiction. Will there be a lead agency for the purposes of this initiative?

Answer: There will not be a lead agency. All of the agencies in the field report to the State Director and he or she will assume the responsibility for carrying out this initiative. Each State Director has a contract with the Administrators of the Agencies and the terms of the contract are negotiated annually based on criteria that includes carrying out the mission of each agency.

Question: What safeguards will be included to ensure that quality citizen participation is considered in rural Economic and Community Development funding priorities?

Answer: The legislation that will be submitted shortly will contain provisions that ensure the views of local governments, state governments, community based organizations, the private sector, and other interested parties are included in the State Strategic plan that will be developed to guide funding decisions. Increased involvement of these groups is one of the keystone principles of the President's Initiative on Performance Partnerships. Effective citizen participation will also be included in the State Director's contract with the Administrators and is part of the annual evaluation of State Director's. Delegating more program responsibility will also help to ensure that citizens are more involved in planning how these funds are spent.

WATER 2000 INITIATIVE

Question: How will this initiative affect USDA's Water 2000 Initiative?

Answer: This proposal should assist in the implementation of the Water 2000 Initiative. The increased flexibility to administer the programs and tailor assistance to meet the needs of

rural residents, the incentives to leverage other public and private monies in funding various projects, the incentive to develop unique solutions to problems, and the authority to use grants, direct loans, loan guarantees, or any combination thereof all should contribute to the successful implementation of Water 2000.

Question: Will the amounts requested for the various components of this initiative take the place of, or be in addition to, the current programs?

Answer: Mr. Chairman, the amounts requested for this initiative replace the amounts requested under current law.

QUESTIONS SUBMITTED BY SENATOR JOHNSTON

RURAL ECONOMIC AND COMMUNITY DEVELOPMENT

Question: As I understand, efforts are underway to streamline Rural Economic and Community Development programs to provide greater efficiency and reduce complexity in applying for assistance under these programs. What accomplishments have been made to date?

Answer: Senator Johnston, the initiative you are referring to is the Rural Performance Partnership Initiative under which we would combine the purposes of 14 existing programs into three broader based purposes under which our State Offices would have the flexibility to tailor assistance to local needs and have limited authority to transfer funds among the three purposes in order to more appropriately address the priority needs of a particular State. The existing program purposes would continue to be delivered to rural communities and the existing eligibility requirements would continue to be met. However, there would be more flexibility in how we meet the needs of rural communities. For example, we are proposing that any project could receive grants, direct loans, or loan guaranteed or any combination of the three based on the type of assistance needed to make a project feasible and based on the financial capacity of the community. We are in the process of finalizing the legislation for this initiative.

LOWER MISSISSIPPI DELTA DEVELOPMENT COMMISSION

Question: In 1990 the Lower Mississippi Delta Development Commission established, pursuant to Public Law 100-468, issued its final report regarding economic needs, problems, and opportunities for the 219 counties which comprise this region which stretches from southern Illinois to the Gulf of Mexico. Subsequently, in 1993, the Senate Appropriations Subcommittee included report language in S. Rept. 103-102 which directed USDA to develop a comprehensive set of recommendations to implement the initiatives related to human capital development, natural and physical assets, private enterprise and the environment contained in the 1990 Commission report "The Delta Initiatives: Realizing the Dream... Fulfilling the Potential." It is my understanding that many of these areas now fall under the jurisdiction of the Rural Economic and Community Development Administration. What progress has been made to implement any new initiatives within existing authority that have been recommended by USDA in response to the findings of the Delta Commission final report? What level of priority has USDA placed on the needs of this region, which is the poorest in the nation.

Answer: The Rural Business and Cooperative Development Service (RBCDS) and its predecessor agency, the Rural Development Administration, initiated a number of initiatives directed at

alleviating persistent poverty, especially in the Mississippi Delta region. They include: partnerships with selected historically black colleges and universities (HBCUs) to promote business development, to support HBCUs in conducting community development activities, to strengthen HBCUs as training laboratories through sponsorship of Capacity Building Grant applications and the Centers of Excellence program and providing summer internship and scholarship opportunities to students of HBCUs in the Delta region. Funding to develop an implementation plan for the recommendations contained in the Delta Commission final report was awarded to Tennessee State University in Fiscal Year 1994.

RBCDS is the lead USDA Agency for rural Empowerment Zones and Enterprise Communities. One of the 3 rural Empowerment Zones is in the Mississippi Delta area and 7 of the 30 rural Enterprise Communities are in the Mississippi Delta area. RBCDS placed 35 Americorps members in rural EZ/ECs, including those in the Mississippi Delta region and assigned an employee the responsibility for coordinating AmeriCorps activities in the Mississippi Delta area on a full-time basis.

EZ/EC Program features, which were identified as issues and recommendations in the Lower Mississippi Delta Development Report include:

every application to the program will benefit through technical assistance provided in strategic plan development, partnership building and leadership development; two Health and Human Service Title XX grants totaling \$40 million for each Empowerment Zone and one Title XX grant of up to \$3million for each Enterprise Community; employee tax credits to eligible Empowerment Zone employers equal to 20% of the first \$15,000 of wages or training expenses for qualified Empowerment Zone employees; tax-free facility bonds of up to \$3 million for some Empowerment Zone and Enterprise Community; additional \$20,000 in expending tax deduction for investments in Empowerment Zones; increased coordination of Federal programs.

Additionally, RBCDS has provided loans and grants to businesses and intermediaries in the Mississippi Delta region. Assisted 6 cooperatives in the Mississippi Delta region. Actively supported the implementation of the Community Development Financial Institution (CDFI) program, which will assist in providing business capital at favorable interest rates to starting entrepreneurs.

RURAL UTILITIES SERVICE
QUESTIONS SUBMITTED BY SENATOR COCHRAN

Telecommunications Programs

Question: Last year, the Administration proposed to reduce funding for distance learning and medical link grants by 50 percent, from the \$10 million appropriated for fiscal year 1994 to \$5 million, despite the high demand for the program and its proven success. As I recall, you justified the lower request on the basis that the Administration was requesting \$15 million for a new rural telecommunication partnership loan program which would give adequate attention to medical and educational facilities.

The fiscal year 1996 budget again requests \$15 million to initiate a new rural telecommunication partnership loan program. In addition, \$100 million is requested for a new distance learning and medical link loan program requiring authorization, and a 100 percent increase in funding is proposed for distance learning and medical link grants, from \$7.5 million appropriated for fiscal year 1995 to \$15 million. Why has the Administration now determined that additional resources, at the levels requested, are required to support rural telecommunications programs?

Answer: The Department's FY 1995 budget request was based on available information regarding the Distance Learning and Medical Link Grant Program after only one full year of program implementation, and RUS's challenge to establish a new program ensuring that projects initially funded would meet RUS quality standards comparable to its existing telecommunications programs.

In crafting its FY 1996 budget, RUS now has the benefit of a successful three year track record of implementing the Distance Learning and Medical Link Grant Program and information which indicates that significantly larger appropriations, including funding for end user equipment and transmission facilities, can be effectively utilized to bring rural communities into the information age.

First, during the past three years, 1993 through 1995, RUS has received unduplicated applications from 353 applicants requesting a total of \$111 million in Federal funding. With \$27.5 million which has been appropriated during this period, RUS will have selected approximately 85 projects for funding - RUS selected 28 projects in FY 1993, 33 projects in FY 1994, and we expect approximately 24 selections for FY 1995. RUS has provided written feedback and assistance to those applicants not selected for funding. Our efforts have resulted in a "pool" of projects which have been improved and refined to the extent that Federal funding could be effectively utilized to provide immediate and significant benefits to rural areas.

Second, RUS has received requests for and provided information and written program material regarding advanced telecommunications and the Distance Learning and Medical Link Grant Program to over 10,000 potential customers. Assuming an application rate of 20 to 25 percent, comparable to other Federal grant programs, this could

result in 2,000 to 2,500 rural entities requesting RUS funding to access the information super-highway for better education and medical services to rural citizens. Based on average grant levels of \$300,000 per project, RUS estimates that 2,000 applications could translate to over \$600 million of funding demand.

Third, our program experience indicates that loans, as well as grants, can be effectively utilized by the RUS as the rural component of the Administration's goal to build the National Information Infrastructure. The FY 1996 budget proposes a \$100 million loan program which would be used in conjunction with the requested \$15 million in grants to meet the projected funding demand for distance learning and telemedicine projects, including end user equipment, transmission facilities, and other costs which are necessary to establish viable projects.

Fourth, RUS's extensive experience in rural economic development and the overwhelming response to the Distance Learning and Medical Link Grant Program from business and economic development organizations, as well as schools and hospitals, points to the need for a loan program which makes the National Information Infrastructure available for rural business and economic development. A \$15 million appropriation for a Rural Telecommunications Partnership Loan Program, authorized in the 1990 Farm Bill, will fill a unique niche to utilize RUS's telecommunications expertise for rural business and economic development.

Question: What is the distinction between the rural telecommunication partnership loan program and the proposed distance learning and medical link loan and grant programs?

Answer: The Rural Telecommunications Partnership Loan Program will focus on rural businesses and the resulting economic development and job creation, rather than the more specialized areas of distance education and healthcare delivery which are addressed through the proposed Distance Learning and Telemedicine Loan and Grant Program.

Question: How will the rural telecommunication partnership loan program and the proposed distance learning and medical link loan and grant programs be compatible and not duplicative?

Answer: The Rural Telecommunications Partnership Loan Program will promote development of the National Information Infrastructure as the business and economic development counterpart to the Distance Learning and Telemedicine Loan and Grant Program. This important economic development program will complement and build upon the Distance Learning and Telemedicine Loan and Grant Program's funding of improved educational and medical service delivery by providing a funding mechanism for business development.

The Rural Telecommunications Partnership Loan Program will:

- (1) address the needs of rural businesses to remain competitive with metropolitan-based companies;
- (2) facilitate a synergy between rural businesses, entrepreneurs, educational institutions, and local government and community development organizations to improve the information and communication capabilities of the information superhighway;
- (3) provide incentive for rural businesses, and other private and public sector organizations, to form consortia or

partnerships. This collaboration will integrate various isolated or "stand alone" technological systems into larger clusters of communicating networks; thereby leveraging technological resources to achieve a "whole greater than the sum of the parts"; and, (4) improve employment opportunities and provide efficient government services to rural residents and businesses.

As opposed to the Distance Learning and Telemedicine Loan and Grant Program, which will fund primarily educational and medical institutions, the Rural Telecommunications Partnership Loan Program will finance telecommunications equipment for privately or publicly sponsored telecommunications business incubators, industrial parks, training facilities, or telecommuting centers. The program will also be used to assist rural businesses to install telecommunications facilities for business expansion, distance education related to job training, and medical care for employees and their families. Businesses, non-profit entities, local governments or public agencies in rural areas will be eligible for funding.

Question: Will assistance provided by the rural telecommunication partnership loan program and the proposed distance learning and medical link loan and grant programs be coordinated with the Department of Education and Department of Health and Human Services?

Answer: Yes. RUS has maintained ongoing coordination efforts with the other Federal and State Agencies in implementing the Distance Learning and Medical Link Grant Program, and we expect to continue this productive leveraging of the resources available through other Federal and State Government Agencies, including the Department of Education and the Department of Health and Human Services. It should be noted that the proposed programs, delivering improved education, healthcare, and rural development, are targeted exclusively to rural areas, and telecommunications is the common link to realizing the expected program benefits.

Question: Has the Administration submitted its distance learning and medical link loan legislative proposal to the Congress? If not, when will it be submitted?

Answer: The Department is finalizing the legislative proposal and we expect the proposed legislation to be submitted to the appropriate Congressional Committees in mid-April.

Question: Would you please provide for the record a list of the distance learning and medical link grant awards made in each of fiscal years 1994 and 1995 to date.

Answer: [The information follows:]

1994 Distance Learning Medical Link Grant Awards

<u>St</u>	<u>Applicant</u>	<u>Grant</u>
AK	Copper Valley Economic Development Council, Inc.	\$487,776
AR	University of Arkansas for Medical Science	490,000
AR	Ozarks Unlimited Resources Educational Co-op	450,000
CA	Educational Enhancement Foundation	394,450

CO	Montrose County SD RE-1J	94,975
CO	Conejos County Hospital	68,000
FL	Lake City Community College	220,000
IA	HLV Community School District	230,000
IL	Mercer County Hospital	100,000
KS	University of Kansas Medical Center	200,000
KS	West Solomon Valley School District #213	360,000
KY	Murray State University	319,376
MI	Baldwin Family Health Care, Inc.	250,000
MN	Minnesota Tele-Media	360,000
MS	Mississippi Authority for Education Television	271,929
MT	Scobey Public Schools	299,000
MT	Montana Deaconess Medical Center	400,000
ND	West River Health Services	300,000
NE	Educational Service Unit 15	480,426
NY	Western New York Rural Healthcare Association	243,000
OH	Hocking Technical College	200,000
OK	McCurtain County Higher Education Program	305,437
PA	University of Pittsburgh	320,000
SC	Richland Memorial Hospital	423,648
SD	Artisean/Letcher School District 55-5	430,000
TN	Excellence in Community Education & Econ.Dev.	301,830
TX	Dell City Independent School District	171,500
TX	North Texas Education Network Corporation	156,094
UT	Southeastern Education Service Center	448,848
VT	Grand Isle Supervisory Union	360,000
WA	Eastern Washington University	400,000
WI	Tri-County Memorial Hospital	63,711
WY	Northwest College	<u>400,000</u>

10,000,000

For Fiscal Year 1995, \$7.5 million is available under the Distance Learning Medical Link Grant Program. The application filing deadline was January 14, 1995. We have 247 applications currently under review, reflecting a total of \$79.8 million in funding requests. Awards should be made during the latter part of April.

ELECTRIC PROGRAM

Question: It is my understanding that power sale agreements, rate schedules, and transmission agreements entered into by rural electric loan borrowers are filed with the Rural Utilities Service and that the same agreements entered into by investor-owned and publicly-owned utilities are filed with the Federal Energy Regulatory Commission (FERC). While the documents filed with the FERC are readily available to the public, those filed with RUS are not. As I understand it, copies of the rural electric agreements can only be obtained through a Freedom of Information Act request, and some have complained that the material provided is incomplete. Please provide an explanation to the subcommittee for this inconsistency between these two federal agencies.

Answer: The Rural Utilities Service (RUS) electric borrowers are not regulated by the Federal Energy Regulatory Commission (FERC) and do not need to meet their filing requirements. RUS is, therefore, not familiar with the specific filing requirements at FERC nor with their disclosure policy.

The types of agreements mentioned in your question (e.g. power sale agreements, rate schedules, and transmission agreements) for RUS borrowers generally are subject to RUS approval, in accordance with the borrowers' mortgage and loan contract. In considering any request for disclosure of documents, RUS complies with the applicable USDA regulations, Executive Order 12600 on disclosure of confidential or privileged commercial or financial information and the Freedom of Information Act (FOIA).

In many instances complete documents are disclosed by the Agency in response to a request. However, in some instances documents are redacted and disclosure of information withheld in order that the release not cause substantial competitive harm to the submitter of commercial or financial information.

Question: Is there authorization in statute to require these FOIA requests to obtain this information?

Answer: Yes, our policy is in accordance with the FOIA, (5 U.S.C. section 552) as well as USDA regulations and the Executive Order 12600.

Regulatory Reform

Question: The budget justification indicates that the Rural Utilities Service has recently made regulatory changes for electric systems which choose to move to private sector financing to make it easier for the sharing or accommodation of the government's lien on these systems. What changes have been made?

Answer: A final rule on Lien Accommodations and Subordinations was published on October 19, 1993, and a proposed rule on Loan Security Documents for Electric Borrowers was published on September 29, 1994. Both of these rules are intended to modernize and streamline RUS procedures and security instruments to reduce the processing burden on borrowers and to accommodate borrowers wishing to obtain financing from the private markets.

Question: How many electric systems do you anticipate will move to private sector financing as a result of these changes?

Answer: The Rural Electrification Administration Improvement Act of 1992 provided a mechanism for the electric borrowers to buy-out of the program on a net present value basis. This calculation uses a discount rate based on the cost of borrowing to the U.S. Treasury and is therefore revenue neutral. The Treasury receives a repayment on its outstanding low interest loans years before final maturity. RUS published a final rule to implement the provisions of this Act on March 22, 1994.

Since that date, RUS has received 47 applications to prepay. Thirty-one borrowers have prepaid approximately \$359 million; 21 of the thirty-one borrowers have prepaid all of their outstanding direct/insured loans at the present value while 10 have prepaid some but not all of their outstanding debt. It is anticipated that these 10 will prepay the remainder of their debt in the near future.

We believe that borrowers will continue to prepay their loans, thereby allowing RUS to further target its limited funds towards those areas truly needing assistance.

Rural Telephone Bank Privatization

Question: Is it realistic to assume that full privatization of the Bank can be achieved in fiscal year 1996?

Answer: Yes, given the President's budget proposal and the Bank's current stable financial condition, the Bank is capable of privatizing in one year and without any undue hardship. Under the direction of the Administration and the experienced leadership of the Board of Directors, a successful privatization in fiscal year 1996 is achievable.

Question: What level of funding do you estimate will be required to retire 100 percent of the Bank's Class A stock remaining after the transfer of the Bank's Equity Fund balance?

Answer: We estimate that the Bank will have \$350 million in the Equity Fund by the end of FY 95. As a result, an additional \$242 million would be needed to retire 100 percent of the \$592 million of Class A stock currently outstanding.

Question: Is this proposed language--'to authorize transfer of Equity Fund and appropriate funds to retire 100 percent of A stock'--being submitted to the authorizing committee?

Answer: The proposed language is included in the appropriations bill. In addition, technical amendments will be submitted to the authorizing committee to assist the Bank in privatization and ensure a successful transition.

Question: Is the enactment of this language--'to authorize transfer of Equity Fund and appropriate funds to retire 100 percent of A stock'--a prerequisite to privatization of the Bank?

Answer: Yes, it is a prerequisite to retire 100% of Class A stock. Existing legislation--the RE Act--enables the Bank to retire 100 percent of the A stock within one year if the operations of the Bank are not impaired. The appropriation required to retire the remainder of Class A stock, after transfer of the Equity Fund to the Treasury, is necessary in order to achieve total privatization in fiscal year 1996. Without authorization to make such a transfer and have additional funds appropriated for the retirement of the A stock, the Bank would not be able to privatize in the manner proposed in the President's budget.

Question: Why is this language--'request for inclusion of a general provision on the FY 1996 appropriations bill which would repeal provisions of the RE Act and establish a new formula for determining interest rates charged to Bank borrowers and require the Bank to reimburse the RUS for administrative costs'--being requested on the appropriations bill?

Answer: Including this language in the appropriations bill will allow the privatized Bank to charge an interest rate that will

reflect all operating costs. The authorizing committee will receive a legislative proposal containing technical amendments which will make this and other changes to the RE Act. It is included in appropriations language for the sake of completeness.

Question: Why isn't this language--request for inclusion of a general provision on the FY 1996 appropriations bill which would repeal provisions of the RE Act and establish a new formula for determining interest rates charged to Bank borrowers and require the Bank to reimburse the RUS for administrative costs--being submitted to the authorizing committee of jurisdiction for consideration?

Answer: Including this language in the appropriations bill will allow the privatized Bank to charge an interest rate that will reflect all operating costs. The authorizing committee will receive a legislative proposal containing technical amendments which will make this and other changes to the RE Act.

Question: If the Bank is to be fully privatized in fiscal year 1996, why are you requesting reimbursement of Rural Utilities Service for the administrative expenses incurred by its employees during the transition "beginning in FY 1996 and thereafter...?"

Answer: Access to the RUS staff and its resources are needed by the Bank in order to ensure a successful transition from a Government agency to a privatized entity. Acquiring the needed expertise and resources will take time. Access to RUS during this period will allow the Bank to operate in a financially responsible manner.

Rural Electric Programs

Question: Since 1993, the cost of the Rural Electric Loan program has come down substantially. For example, in 1993 the cost of the rural electric insured and guaranteed loan programs was \$153 million. For FY 1996 the President's budget for the rural electric program involves a cost of \$89 million. That's a reduction of 72 percent.

Given recent increases in interest rates, what accounts for the substantial decline in loan subsidies in the Rural Electric Loan Program?

Answer: Total available funds and the distribution of those funds have had significant impact on the substantial decline in loan subsidies. In fiscal year 1993 two loan programs were funded for the electric program--the direct 5-percent loan program and the FFB financed direct loan program. Since that time Congress enacted the Rural Electrification Loan Restructuring Act which targeted the 5 percent loan program for hardship borrowers and established a municipal rate direct loan program, at a lower cost to the Government, for more financially able borrowers. Due to targeting of resources as provided in RELRA, a significantly lower subsidy cost in fiscal year 1996 would provide a slightly higher direct program level.

In addition, subsidy was provided for an \$813 million FFB financed loan program in FY 1993 compared to the \$400 million requested for fiscal year 1996.

Question: How do the interest rate subsidies that rural electric cooperatives receive compare to subsidies that other utilities receive?

Answer: The most relevant comparison of the interest rate subsidy to rural electric cooperatives (REC's) is with the subsidy given to municipal electric's which may raise capital at below market interest rates. The federal subsidy given to Investor Owned Utilities (IOU's) is more complex and is not directly comparable, because the subsidy is arrived at through tax benefits not directly associated with a low interest rate loan.

The easiest answer is by way of an example comparing a \$100 RUS muni-rate loan with a \$100 loan to a muni under its tax exempt debt issue authority. The cost to the U.S. Treasury for a \$100 RUS loan at the current muni rate (as of March 24, 1995) of 6.875 percent vs. the Treasury borrowing rate of 7.46 percent is only .59 cents. To compare this subsidy with a tax exempt muni issue we must make a basic assumption because this cost to the Treasury is the lost tax revenue that would have been paid by the "investor" or lender in the muni. If we assume that the ultimate lender to the muni is a high income individual, whose income is taxed at the 39.6 percent bracket, and further if tax-exempt interest were not available (no subsidy to muni's) the money would be invested conservatively in high grade corporate debt currently yielding about 8.04 percent, which would result in taxable interest income, then the cost to the U.S. Treasury in lost tax revenue is about \$3.18 for each \$100 borrowed. This results in a subsidy, to the muni of more than five times the subsidy to RUS borrowers. Even the difference between a Hardship rate loan at 5.00 percent vs. the Treasury rate of 7.46 percent costs the Treasury only \$2.46 for each \$100 borrowed, or about two thirds the subsidy involved in tax exempt borrowing authority for municipals.

Reorganization

Question: The request for the Rural Utilities Service (RUS) salaries and expenses account includes an increase of \$2.6 million for costs associated with office consolidation to implement the reorganization. Similar increases of \$17.8 million for the Rural Housing and Community Development Service (RHCDS) are also proposed.

Are these requested increases to consolidate offices to implement reorganization offset elsewhere in USDA's budget, or will reorganization require increased funding in fiscal year 1996? If these increases are offset, please indicate where the savings are reflected in USDA's appropriations request?

Answer: Mr. Chairman, the USDA budget for FY 1996 incorporates the savings resulting from the Departmental reorganization and streamlining activities, and the USDA budget is within the budget cap established for the Department by the Office of Management and Budget which is consistent with the freeze on discretionary spending. The increases requested for office consolidation and relocation costs are offset elsewhere in the USDA budget, but we are not able to specifically identify other programs or functions that have been reduced to accommodate these increases. As you are aware USDA estimates the total savings associated with reorganization and streamlining are \$4.1 billion through FY 1999. However, in order to

achieve some of the savings it is necessary to incur some up-front one time cost increases. The total savings estimate is net of these one time increases.

Question: I would anticipate that this committee will be required to hold discretionary spending at or below freeze levels for FY 96. Will USDA be able to proceed with this reorganization if the increased funds requested for field office consolidations and restructuring are not provided?

Answer: The reorganization of the field offices could proceed, but it would not be as timely and organized as conceived in the initial planning. Additionally, since the Department's budget includes savings attributable to closing these offices, there would have to be deep reductions in staffing since we cannot afford to keep these offices open. Further, the savings anticipated from reorganization and streamlining would not be realized within the time frames originally anticipated. We undoubtedly would have to reschedule office closings until we were able to relocate personnel.

Salaries and Expenses

Question: The budget request for salaries and expenses of the Rural Utilities Service (RUS) includes savings of \$964,000 in administrative costs and \$137,000 for FTS 2000.

Please provide a breakdown for the committee of where these administrative savings will be achieved.

Answer: The administrative savings reflect the general reduction in administrative expenses based on estimates of decreased usage.

Question: How was the savings of \$137,000 for FTS 2000 calculated?

Answer: Due to price determinations in the FTS 2000, contracts, the budget reflects lower long distance telecommunications prices. The \$137,000 savings for RUS represents the agency's pro rate share of the USDA's \$5 million savings.

Question: Will the increase of \$1.415 million requested for FY 96 pay cost increases fully cover all projected pay increases, including annualization of the 1995 locality pay and any FY 96 locality and general pay increases?

Answer: The requested pay cost increase includes annualization of 1995 pay as well as the general pay increase for FY 1996. It does not include a FY 1996 locality pay increase.

Rural Water and Waste Disposal Loans and Grants

Question: The request for the direct water and waste loan account reflects an increase in the loan program of \$53 million, from an actual \$827.9 million FY 95 program level reflected in the budget to \$880.9 million in FY 96. A \$90 million increase is requested for rural water and waste disposal grants from the fiscal year 1995 level.

How will the FY 96 request for rural water loans and grants support the President's Rural Development Initiative and the Department's Water 2000 Initiative?

Answer: The FY 96 request for rural water loans and grants is the cornerstone for providing the much needed investment in basic infrastructure in rural America. Investment in rural water and waste disposal systems is a fundamental component of both the President's Rural Development Initiative and the Department's Water 2000 Initiative. The requested funds will assist rural communities to develop water and waste disposal projects to improve their economies and the health of the people living in those communities who are unable to obtain credit from other sources. We estimate that there are about 400,000 households in this country which still do not have portable water in their homes. The requested increase will provide assistance to 924 rural communities, an increase of 110 communities will be able to provide safe, affordable drinking water to their residents.

Question: What is the current backlog of requests, both in number and dollar amounts, in rural water and waste disposal direct loan and grant programs?

Answer: As of March 10, 1995, we had on hand 1,783 unfunded applications and preapplications totalling \$2.56 billion for water and waste disposal loan funds. There were 1,096 grant applications and preapplications for \$1.13 billion.

Question: Do communities which qualify for this loan program also qualify for the Environmental Protection Agency's State Revolving Loan Program and the proposed Safe Drinking Water Revolving Loan Program?

Answer: In most cases we believe communities that qualify for the water and waste disposal loan program would also qualify for the Environmental Protection Agency's State Revolving Loan Program. At this time there is no authorized Safe Drinking Water Revolving Loan Program. However, each State that currently has a wastewater revolving fund has developed its own loan standards and there may be some communities that our loan program could assist that might not qualify for the State's program. In addition, there is pressure to put the State Revolving Loan Program funds into larger communities that assist the greater number of people and although smaller rural communities may qualify, they do not have funding priority. Also, not-for-profit organizations are not eligible to participate in the Environmental Protection Agency's State Revolving Loan Program and in some States, not-for-profit organizations are the primary providers of safe drinking water to rural people.

Question: If so, is there a need for duplication of these services? Couldn't the other programs just be modified to provide preference for rural communities?

Answer: We believe that there is a need for services that focus on rural communities and their unique problems. Many of these rural communities suffer from a lack of people and technical expertise to construct water and waste disposal infrastructure projects. Our water and waste disposal programs help rural communities with

technical and financial assistance in a way that a State program which has to serve urban as well as rural areas cannot. Providing preference for rural communities would help in getting more financial assistance to these communities.

Cost of Regulations

Question: The budget justification notes that in recent years, water and waste systems have been subject to increasingly stringent regulation based on the Safe Drinking Water Act and the Clean Water Act, and the Rural Utilities Service water and waste disposal program is instrumental in providing financing to build and upgrade rural water and waste facilities.

Have these regulations precipitated increased requests for program participation, and therefore, increased the cost to the taxpayer to fund these Rural Utilities Service programs?

Answer: Many of the requests for water and waste disposal financial assistance are from rural communities under orders from their State regulatory agency to bring their systems into compliance with the Safe Drinking Water Act or the Clean Water Act. Less stringent regulation based on the Safe Drinking Water Act and the Clean Water Act could decrease costs to taxpayers. However, we cannot address the health issues that may be involved with the changing of the standards.

Rural Telephone Bank

Question: What effect will immediate privatization of the Rural Telephone Bank have on the Bank's interest rates?

Answer: Privatization will result in the Bank paying its own operating expenses and obtaining any needed capital from the private market. However, because of the Bank's current healthy financial condition, projected stable cash flows, and status as a non-profit lending institution, privatization will not have a significant effect on rates charged to borrowers.

Question: Will the bank still be able to borrow from the Treasury to meet loan advances?

Answer: The Bank's existing legislation enables a privatized Bank to borrow from Treasury at the discretion of Treasury. However, because of Federal Credit Reform is not anticipated that the Bank as a private entity will seek Treasury funding. Estimates have shown that the Bank can borrow from the private market to meet any cash flow deficiencies and operate successfully.

Question: What will be the treatment of the almost \$1 billion in approved but unadvanced loans?

Answer: Unadvanced loan funds--totalling \$766 million--will be advanced by the Bank in accordance with its contractual obligations with its borrowers.

Question: Will these loans--approved but unadvanced loans--be funded by Treasury? If not, why?

Answer: No, estimates have shown that the Bank will have sufficient cash flows to meet most of its cash obligations--including advances. When borrowing is necessary to meet cash deficiencies, the Bank can borrow from the private market and still operate successfully.

Question: In lieu of the Administration's proposal to allow a "such sums as may be necessary" appropriation to retire the balance of the Class A stock after depletion of the equity account, why not retire the stock gradually over the next 10 years with margins and then privatize the bank, which would eliminate the need for the appropriation?

Answer: The Bank today is financially healthy and, under the President's budget proposal, has the means to privatize within one year. Privatizing the Bank now, under the President's proposal, will equitably resolve issues about the use of the equity fund. Resolving these issues in the proposed way will allow us to realize the promise of the Bank as a steady source of capital for Rural Telecommunications infrastructure. In addition, in today's economic environment there is a strong Federal and public commitment to streamline government operations and empower private enterprise to fulfill what are now Federal government initiatives--such as the President's National Information Infrastructure and rural development initiatives. Privatization of the Rural Telephone Bank is one area where this goal can be successfully achieved in a short time frame at no cost to the Government.

Question: Will the Bank's existing loan portfolio transfer to the privatized Bank?

Answer: Yes. The President's budget proposal contains language that will transfer the Bank's entire loan portfolio as well as its related liabilities.

RURAL HOUSING AND COMMUNITY DEVELOPMENT SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

LOAN PROGRAM

Question: It is my understanding that the Rural Housing and Community Development Service has a number of options at its disposal to deal with distressed or delinquent borrowers. Would you provide the subcommittee with an explanation of these options?

Answer: RHCDS utilizes a number of servicing tools to deal with distressed borrowers. The following is a list and explanation of these options:

1. Supervised credit/credit counseling - We are involved with our borrowers from a pre-application stage to successful graduation to another lender. That means technical, financial and/or counseling assistance is extended to borrowers who experience difficulties in carrying out the responsibilities of home ownership. In addition, RHCDS presently has a pilot program in 9 states to provide formal classroom training on a variety of homeownership issues.
2. Interest credit assistance - We have the authority to subsidize a borrower's payment down to an interest rate of as low as 1 percent, based upon a formula that states a borrower's payment should not exceed 20 percent of their adjusted income.

Approximately 50 percent of all borrowers nationwide are presently receiving interest credit assistance, and virtually 100 percent of all new borrowers are receiving interest credit.
3. Moratorium - A period of up to 2 years during which scheduled house payments are deferred for payment at a later date. Moratoriums are granted in instances where circumstances beyond the borrower's control prevent them from making a payment without unduly impairing their standard of living (i.e., death in the family, unreimbursed medical expenses).
4. Delinquency Workout Agreement (DWA) - If a borrower becomes delinquent, we can enter into an agreement where the borrower pays an amount of payment in addition to a regular monthly installment to resolve a delinquency. This is based upon a household budget that is developed by the field office and the delinquent borrower.
5. Reamortization - An extension of the loan to the maximum authorized repayment period, or a rearrangement of the payments within the remaining years of the original repayment period. This is most commonly used upon the expiration of a moratorium or the reinstatement of an account after acceleration (foreclosure initiation) has been resolved.
6. Voluntary liquidation - Allows the borrower to sell the financed property for market value to pay of the debt. Any balance remaining is resolved through a debt settlement procedure.

The Agency applies these servicing tools in a reasonable and equitable manner consistent with the twin goals of both creatively addressing an individual borrowers circumstances and maintaining a sound fiscal discipline within the program.

Question: Also, please provide the committee with the number and the dollar amount of principal and interest that has been forgiven or "written off" in the last three fiscal years.

Answer: The number and dollar amount of principal and interest that has been forgiven or "written off" in the last three fiscal years for Section 502 single family housing loans is:

<u>Direct Loans</u>	<u>FY 1994</u>	<u>FY 1993</u>	<u>FY 1992</u>
SFH Principal	\$134,500,000	\$156,300,000	\$173,300,000
Interest	19,250,000	19,500,000	19,700,000
No. of Borrowers	10,621	10,769	10,796
%of Portfolio	.73%	.83%	.91%

These write-off amounts should be taken in the context of the \$18.7 to \$19 billion loan portfolio outstanding during these years, where the principal amounts "written off" represent between .9% and .7% of the portfolio and are decreasing.

Question: Please provide the subcommittee with the number and dollar amount of new loans which have been made to borrowers who have previously had Farmers Home Administration loans written off or are currently delinquent.

Answer: The Agency does not have this data available; however, we do not deem this to be a "high risk" area due to other measures that are in place which are designed to prevent this from occurring. They are:

1. Current/Past FmHA loan history - Field offices input an applicant's social security number into the FmHA automated system to determine the FmHA credit history of an applicant. Previous problem borrowers would show up as bad credit risks.
2. CAIVRS (Credit Alert Interactive Voice Response System) - This system alerts the field office to borrowers who have been referred to the IRS for collection of a federal debt. Past delinquent borrowers would show up on this system.
3. FmHA regulations do not authorize loans to be made to applicants whose previous debts have been debt settled by the Agency, as reflected by field office records.

SECTION 502 HOUSING PROGRAM

Question: The fiscal year 1995 appropriation for the Section 502 (single family) direct housing loan program significantly reduced the backlog of loans. How many households have applied for loans so far this fiscal year?

Answer: The January 1995 Housing Activity report indicates that there were 53,977 applications on hand. Approximately 10,000 applications are received on a monthly basis.

As you know, every housing loan is approved subject to funding provided by Congress. As a result of the Federal Credit Act of 1990, program levels contained in annual appropriations acts for subsidized Federal loan programs are estimates of the program loan amounts. The actual amount which can be loaned is a function of the subsidy cost for those loans which is contained in the Appropriations Acts. For Fiscal Year 1995, Congress appropriated a subsidy level of \$227.5 million for the 502 direct loan program which was estimated to permit \$1.2 billion of RHCDS subsidized housing loans. However, as a result of higher interest rates, the subsidy costs of these loans were calculated to have increased such that the appropriated subsidy will only support a lower level of RHCDS housing loans. Because of this increase in subsidy costs, the actual amount of rural housing loan funds that RHCDS can make available for applicants in FY 1995 has been reduced to \$933,931,000. Compared to the FY 1994 housing loan level of \$1.8 billion (only \$1.66 billion was supportable with appropriated subsidy), the Agency has experienced a program reduction in FY 1995 of almost 44 percent.

Question: How many families are likely to receive new loans during fiscal year 1995, and how does this compare to fiscal year 1994?

Answer: Our FY 95 supportable loan level of \$933,991,000, will yield approximately 19,830 new loans. In FY 94, 34,505 loans were made with a total obligation of \$1,657,737,657.

Question: Do you anticipate a backlog entering fiscal year 1996? How will the fiscal year 1996 request for this program address this backlog?

Answer: The Agency anticipates an increase in the backlog of applications to 70,000 entering FY 96. There are 53,977 applications on hand as of January 1995.

The FY 96 request for this program addresses this backlog as follows:

RECD county offices currently notify applicants of the huge backlog in applications and the potentially long wait for a mortgage loan. In addition to trying to ensure that rural families understand the implications of the limited funds available, RHCDS is trying to stretch its direct 502 funding as much as possible. In FY 95, RHCDS initiated some leveraging pilots for the 502 direct loan program, and we plan to make this a major component of the program in FY 96. We are working with State housing agencies and private lenders to develop a program whereby State agencies or lenders will make a portion of the loan and take a first lien position, and RHCDS will make the remaining amount of the loan needed using our Direct Loan 502 program and take a second security position.

By participating with other lenders, we will be able to stretch our funding and assist more families in obtaining housing. This is a new initiative, and we are still developing a working relationship with other lenders. With the loans that have closed using this leveraging concept, we are averaging a 50-50 loan

participation with these lenders. Although we can assist some of our applicants with leverage dollars by participation with the private sector, many of the RHCDS very low- and low-income applicants will need the full financing of a RHCDS direct loan. A leveraged loan carries a higher interest rate and therefore may not be affordable to our very low-income applicants.

SELF-HELP PROGRAM

Question: The Self-Help Housing Land Development Fund Program (Section 523) provides qualified public or private nonprofit organizations with financing for the acquisition and development of rural building sites for houses to be constructed by the "self-help" method. What is the "self-help" method?

Answer: The "self-help" method is utilized when a group of families or individuals pool their own labor to complete a group of homes. In providing this "sweat equity" they help themselves as well as others in the group to own a home at a cost that is less than market value. In addition, the mortgage provided by the Government is less than it would have been otherwise if paying full market price. The Self Help program provided 1,143 loans during FY 94. There are approximately 75 State and community based non-profit organizations active in the Self Help program.

Question: Is this program cost effective?

Answer: Considering the cost savings to the homeowner, the lower mortgage financed by the Government, and the added pride of ownership, this program is cost effective. It is estimated that the average homeowner under the self-help method realizes an average of \$5,000 savings in construction cost. In addition, the homeowner learns basic construction and maintenance skills.

SECTION 515 HOUSING PROGRAM

Question: I understand that the General Counsel has ruled that funds appropriated for fiscal year 1995 for the Section 515 (multiple family) housing program may be obligated, despite the fact that the existing law states that no loan shall be made after September 30, 1994. In addition, the House has proposed to rescind funding for this program. What was the basis for the General Counsel's ruling?

Answer: Our General Counsel believes that RHCDS has the authority to obligate Section 515 funds based upon the passage of the appropriation of funds, creating a presumption of implied extension and the absence of any contrary evidence of Congressional intent.

Question: It is my understanding that there is a significant need for repairs in 515 housing. Now that these funds are being obligated, how will the Department prioritize repair loans versus new loans?

Answer: All states have been provided with an annual allocation of funds. However, the obligation of those funds is controlled through a national weekly apportionment schedule

determined by OMB for the allocation of the 515 program. Each week, the weekly apportionment of funds will be obligated according to the following national priority: Critical health and safety violations are funded first; Deferred maintenance, inventory sales and in those states which have no rehabilitation needs, new construction projects, are funded second if funds are available; and new construction projects are the last funding priority in those states where rehabilitation needs exist.

Question: What is the current backlog of 515 loan applications? How will the release of these funds affect this backlog? At current interest rates, how will the fiscal year 1996 request affect this backlog?

Answer: As of January 1995, RHCDS had approximately \$1.5 billion in eligible and feasible loan requests on hand to construct new units. Of our \$212 million deliverable program this fiscal year, we anticipate \$125 million will be utilized for new construction reducing this backlog to \$1.375 billion. We also plan to reduce this backlog by returning lower priority loan requests to applicants. For FY 96, we requested budget authority to deliver a loan program of \$220 million. Of course, due to potential increases in the subsidy rate resulting from interest rate fluctuations, the exact program level will not be known until the beginning of FY 96.

Question: At what rate and level has the FY 95 funding been obligated to date?

Answer: OMB is providing RHCDS with a weekly apportionment of funds. As of March 28, RHCDS has obligated over \$21 million in loans. We anticipate that 100% of funds made available each week will be obligated. The schedule is as follows:

ATTACHMENT 1

Total 515 Resources:	211.733 Supportable loan level
(\$ millions)	115.5 Subsidy BA
Already obligated	2.911741 Loan level
	1.588355 Subsidy BA
Remaining	208.8213 Loan level
	113.9116 Subsidy BA

/2 Weekly allotment

Week	Loan Level	Subsidy BA	Historical Obligation Rate By Week
February 27 thru March 3	3.625	1.977	1.74%
March 4 thru March 10	3.625	1.977	1.74%
March 11 thru March 17	3.625	1.977	1.74%
March 18 thru March 24	3.625	1.977	1.74%
March 25 thru March 31	3.625	1.977	1.74%
April 1 thru April 7	5.548	3.027	2.66%
April 8 thru April 14	5.548	3.027	2.66%
April 15 thru April 21	5.548	3.027	2.66%
April 22 thru April 28	5.548	3.027	2.66%
April 29 thru May 5	4.053	2.211	1.94%
May 6 thru May 12	4.053	2.211	1.94%
May 13 thru May 19	4.053	2.211	1.94%

May 20 thru May 26	4.053	2.211	1.94%
May 27 thru June 2	6.413	3.498	3.07%
June 3 thru June 9	6.413	3.498	3.07%
June 10 thru June 16	6.413	3.498	3.07%
June 17 thru June 23	6.413	3.498	3.07%
June 24 thru June 30	6.413	3.498	3.07%
July 1 thru July 7	10.576	5.769	5.06%
July 8 thru July 14	10.576	5.769	5.06%
July 15 thru July 21	10.576	5.769	5.06%
July 22 thru July 28	10.576	5.769	5.06%
July 29 thru August 4	16.681	9.100	7.99%
August 5 thru August 11	16.681	9.100	7.99%
August 12 thru August 18	16.681	9.100	7.99%
August 19 thru August 25	16.681	9.100	7.99%
August 26 thru September 1	2.239	1.222	1.07%
September 2 thru September 8	2.239	1.222	1.07%
September 9 thru September 15	2.239	1.222	1.07%
September 16 thru September 22	2.239	1.222	1.07%
September 23 thru September 30	2.239	1.222	1.07%
TOTAL	208.8213	113.9116	1

RENTAL ASSISTANCE

Question: Is the fiscal year 1995 funding and the fiscal year 1996 request for rental assistance sufficient to renew existing contracts in each of those years?

Answer: Yes. We estimate a need to replace 31,459 rental assistance units in FY 1995 requiring funding of \$397,253,000 and 33,776 rental assistance units in FY 1996 requiring funding of \$439,291,000.

Question: Is current available funding and that requested for fiscal year 1996 sufficient to meet all servicing requirements in each of these years? If not, what additional funds are required to fully address the need nationwide?

Answer: For servicing troubled projects and overburdened tenants we anticipate funding 5,760 rental assistance units at \$71,900,000 during FY 1995 and 9,514 rental assistance units at \$123,745,000 during FY 1996. These levels are adequate to fund the most urgent servicing needs in FY 1995 and FY 1996.

Question: Regulations effective in October 1993 were intended to preclude Farmers Home from building new units in areas with vacancies in existing Section 515 or HUD subsidized units. Have these regulations worked?

Answer: Yes, they have been extremely effective. Beyond precluding the construction of new units in areas with vacancies, these regulations also require that any new units under development by RHCDS, HUD, or another subsidized lender must be built and fully occupied before RHCDS will proceed with a loan proposal in that market area. This precludes oversaturating a market and helps distribute funds to other needy areas in the State.

Question: Please provide for the record information on the rental assistance cost per unit for new construction, renewing

existing contracts, servicing, and debt forgiveness. Also, please indicate the existing demand for each of these categories and how much of this demand the fiscal year 1996 budget request will support.

Answer: Our FY 1996 request for 5-year rental assistance units are as follows:

<u>TYPE OF UNIT</u>	<u>AVERAGE COST</u>	<u>EXISTING DEMAND</u>	<u>NUMBER REQUESTED</u>	<u>TOTAL FUNDS REQUESTED</u>
Renewals	\$13,006	33,776	33,776	\$439,291,000
New Construction	11,845	1,525	1,525	18,064,000
Servicing and Other	13,006	116,287	9,514	123,745,000
Debt Forgiveness	<u>12,900</u>	<u>457</u>	<u>457</u>	<u>5,900,000</u>
TOTAL	\$12,966	152,045	45,272	\$587,000,000

Question: What are your current five-year projections of expiring rental assistance contracts and anticipated budget requests for renewal purposes?

Answer: Our current estimate of rental assistance renewal need over the next 5 years is as follows:

<u>FISCAL YEAR</u>	<u>EXPIRING UNITS</u>	<u>AVERAGE COST</u>	<u>TOTAL COST</u>
FY 1996	33,776	\$13,006	\$439,291,000
FY 1997	30,463	\$13,409	\$408,478,000
FY 1998	34,000	\$13,825	\$470,050,000
FY 1999	36,614	\$14,254	\$521,902,000
FY 2000	34,722	\$14,696	\$510,270,000

Please keep in mind that the potential for rent increases and changes in utility costs, taxes, and tenant incomes reduce the reliability of extended projections into future years'.

Question: What do your most recent survey results indicate on overburdened tenants and vacant units in need of rental assistance? Which states now have the highest percentage of tenants experiencing rent overburden? Which have the highest percentage of vacant units? What is USDA doing to address these problems?

Answer: Our most recent occupancy statistics from January 1994 indicate 90,473 overburdened tenants and 25,814 vacant units.

States with the highest number and percentage of overburdened tenants are as follows:

<u>STATE</u>	<u>NUMBER OF TENANTS OVERBURDENED</u>	<u>STATE</u>	<u>PERCENTAGE OF TENANTS OVERBURDENED</u>
Texas	5,815	Tennessee	35.34%
North Carolina	5,077	Georgia	34.32%
Georgia	4,671	Louisiana	32.85%

Florida	4,627	Mississippi	32.28%
Mississippi	4,581	Connecticut	31.88%

States with the highest number and percentage of vacant units are as follows:

STATE	NUMBER OF VACANT UNITS	STATE	PERCENTAGE OF UNITS VACANT
Texas	2,640	Texas	10.41%
Florida	1,438	Oklahoma	9.70%
North Carolina	1,395	Kansas	8.21%
Alabama	1,191	Wyoming	7.98%
Georgia	1,137	Nebraska	7.76%

An allocation of 4,883 units of servicing rental assistance (RA) was made to RECD State Offices for Fiscal Year 1995. The funds were allocated by determining the total number of units, the number of overburdened tenants and the number of vacant units in each state, and then allocating a proportionate number to each. Allocation of RA to individual projects is made by State Offices after analysis of why the units are needed and what actions are being taken to ensure that the reasons for the financial hardship have been addressed. State Directors were reminded that servicing RA should not be used as a solution to poor cash-flow when management deficiencies or other problems may be at fault. Significant steps have been taken to assure that individual projects negatively impacted by local market conditions are put on a servicing workout plan to correct the problem. Further, we are aggressively pursuing the replacement of problem borrowers and management firms with those who are capable of meeting program objectives. It should be noted that both the number and percentage of overburdened tenants and vacant units have been reduced during the past calendar year. Overburdened tenants decreased from 92,910 or 23.3% to 90,473 or 21.9%, while vacant units decreased from 25,878 or 6.1% to 25,814 or 5.9%.

QUESTIONS SUBMITTED BY SENATOR BYRD

SECTION 502 DIRECT FUNDS

Question: Ms. Kennedy, I have heard from many West Virginia families with incomes that are 80% of the median income in West Virginia or less, who are eager to invest in a home, rather than to continue to pay rent. In West Virginia that would roughly include families with incomes of \$20,000 or less a year. I understand from these families that although they are eligible applicants for the Section 502 direct loan program, due to constraints in the FY 1995 budget, they have been placed on a long waiting list for a direct loan. Under the proposed Administration budget, how many direct loans will the Housing and Community Development Service be able to provide to cover the backlog and future clientele in West Virginia?

Answer: In Fiscal Year 1994, West Virginia was allocated \$27,104,000 and the State of West Virginia made 708 direct loans and actually obligated \$37,489,370. West Virginia was able to

obligate \$10 million more due to unused funds available from other states' allocations which in FY 94 were reallocated through a repooling process. For FY 95, West Virginia was allocated \$14,275,000 and \$581,000 for Section 502 targeted funds for very low and low-income applicants. As of March 13, 1995, the State has made 255 Section 502 direct loans with a total obligation of \$9,639,630. Due to the reduced funding in FY 95, it is very unlikely that any significant additional funds will be available to West Virginia through repooling. Therefore, West Virginia will see a reduction of almost \$23 million in 502 direct loan funds between FY 94 and FY 95, from over \$37 million to \$14.7 million.

Under the proposed FY 96 appropriation of \$1.2 billion, it is estimated that West Virginia will receive an allocation of approximately \$21 million and make approximately 555 loans during FY 96.

As of January 1995, the State of West Virginia has 1,024 applications on hand. Based on current activity, it is projected that 1,609 applications will be on hand at the end of FY 96.

West Virginia has twenty-nine County Offices. The larger County Offices have approximately 70 to 100 applications on a waiting list. The smaller County Offices have approximately 30 to 40 applications on a waiting list.

Question: What would be the impact of the House proposed rescissions in low-income housing programs on rural Americans on a state-by-state basis?

Answer: To our knowledge, the House proposed rescission would not impact the section 502 direct loan program. It only proposes' rescission of \$115,500,000 of section 515 direct loan subsidy which represents the entire appropriated budget authority level for that activity. A State by State analysis has not been performed at this time.

Question: What alternative sources of loans are available to these West Virginia families?

Answer: West Virginia has indicated that the only alternative sources of loans to low income and very low income West Virginia families would be the subsidized programs of the West Virginia Housing Development Fund. This fund is administered by a quasi Government Agency and is funded through revenue bonds.

To address the great demand for the very limited 502 funds, RHCDS is encouraging its state offices to leverage some of their 502 allocations through partnerships with builders, banks, housing finance agencies and state and local governments. RHCDS estimates that if West Virginia leveraged a portion of its Section 502 direct loans, fund usage would increase by more than 10 percent and this will increase the number of loans from an estimated 555 to 625.

TARGETED FUNDS

Question: Ms. Kennedy, the Service reports that a major part of its objective is the targeting of at least 50 percent of the direct Section 502 program towards underserved, impoverished,

or economically declining rural areas. What criteria will be used to define these areas?

Answer: RHCDs certainly is committed to the targeting of its direct Section 502 program toward underserved, impoverished, or economically declining rural areas. However, the agency currently does not target 50% of resources to depressed areas. By statute, 40% of 502 funds are targeted to very low-income families. In addition, \$36 million has specifically been set aside for targeted counties. The remaining 502 direct loan funds serve low-income families nationwide.

RECD State Offices are required to annually identify target areas, assess development needs, and assess the Agency's responsiveness to identified needs. The identification process is based on a comprehensive assessment of an area's needs which includes consideration of the following factors:

1. Communities that have persistent poverty, long-term population and job losses or trauma from natural disasters or basic structural change.
2. Communities with special needs that have not been adequately served during the last 5 years.
3. 540 non metro counties with persistent poverty.
4. Water 2000, which is a goal for all State Offices.
5. Empowerment Zones/Enterprise Communities.
6. Appalachia.
7. Intense need for health care services.

Question: What areas in West Virginia do you expect to qualify under these criteria?

Answer: The RECD State Office has targeted fifteen counties, including those which qualified as Empowerment Zone/Enterprise Community applicants and those areas consistent with the 540 non metro counties with persistent poverty. The persistent poverty counties include McDowell, Mingo, Clay, Lincoln, Webster, Wyoming, Roane, Summers, Calhoun, Braxton, Monongahela (part), Marion (part), Logan, and Barbour counties. The EZ/EC applicants include the counties of McDowell, Mingo, Clay, Roane, Braxton, Nicholas, Fayette, Lincoln and Morgantown (part of Monongahela), Barbour, Wyoming and the Town of Gilbert, Logan, Webster and the Town of Richwood, and Fairmount (part of Marion county).

Question: What alternatives exist for economically disadvantaged West Virginians, who wish to buy rather than rent, if their community of residence does not qualify as a target area?

Answer: The vast majority of Section 502 direct loan funds serve economically disadvantaged applicants across the rural areas of the state, and are not limited to targeted communities. The targeted communities receive an additional infusion of funds in

recognition of the economic distress, poverty and housing conditions in those areas.

In addition to the non-targeted 502 direct loan funds, loans are available from the West Virginia Housing Development Fund, RHCDS Guaranteed Housing program, and commercial lenders. It should be noted that the 502 direct loan program serves families at 80% of median income or below while the 502 Guaranteed program serves families with incomes between 80% and 115% of median income. They are not substitutes for each other, but rather serve different niches of the market.

RHCDS also has a Self-Help initiative that operates in some states. This program spreads limited 502 loans funds by enabling participants to contribute their own sweat equity and therefore require a lower loan for the remaining costs of building the home. The Self-Help program is run through non-profit organizations and local governments. At the moment, there are no Self-Help activities in the State of West Virginia.

RURAL BUSINESS AND COOPERATIVE DEVELOPMENT SERVICE
QUESTIONS SUBMITTED BY SENATOR COCHRAN

RURAL BUSINESS ENTERPRISE GRANTS

Question: Please provide a list of all applications received for rural business enterprise grants for fiscal year 1994 and 1995 to date, indicating the applicant, the amount applied for, and the disposition of the application, including the amount awarded.

Answer: The list that I will provide for the record will show preapplications and applications received during fiscal years 1994 and 1995. A preapplication is the initial submission by an applicant requesting financial assistance from the agency. The preapplication is utilized primarily to determine if the potential applicant meets the eligibility criteria, has the legal authority to borrow the funds, and if credit is available at reasonable rates and terms from commercial sources. An application consist of all the items required to process the grant through approval in accordance with applicable regulations, subject to the availability of funds. (The information follows:)

RBEG APPLICATIONS
FROM 10/01/93 TO 09/30/94

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
AL FORT DEPOSIT IOB	04/15/94	\$74,267	09/12/94	OBLIGATED	\$67,500	\$67,500	09/22/94
NEW HOPE INDUSTRIAL	01/12/94	\$119,850	06/22/94	OBLIGATED	\$118,600	\$118,600	07/11/94
*TOTAL STATE AL		\$192,917			\$186,100	\$186,100	
AR OZARK SMALL FARM	01/25/94	\$165,700	01/25/94	PREAPP WITHDR	\$165,700		00/00/00
OZARK TABLE GRAPE	06/02/92	\$500,000	01/05/94	APP RECVD	\$295,000		00/00/00
*TOTAL STATE AR		\$665,700			\$460,700		
AZ CHICANOS POR LA	08/22/94	\$250,000	08/23/94	OBLIGATED	\$250,000	\$250,000	09/13/94
*TOTAL STATE AZ		\$250,000			\$250,000	\$250,000	
CA KARUK TRIBE	00/00/00	\$188,200	04/24/94	OBLIGATED	\$150,000	\$150,000	07/05/94
ETNA, CITY OF	02/18/94		04/22/94	OBLIGATED	\$190,000	\$190,000	04/29/94
*TOTAL STATE CA		\$188,200			\$340,000	\$340,000	
FL LAUREL HILL,	09/29/93	\$324,756	02/11/94		\$339,700	\$339,700	03/10/94
*TOTAL STATE FL		\$324,756			\$339,700	\$339,700	
GA CRAWFORD COUNTY	01/14/94	\$100,000	04/14/94		\$100,000	\$100,000	04/27/94
PINEHURST TOWN OF	01/14/94	\$92,000	05/03/94		\$92,000	\$92,000	06/30/94
CARNESVILLE CITY OF	01/13/94	\$250,000	03/16/94		\$225,000	\$225,000	04/30/94
CHESTNUT-CHATAHOOC	01/14/94	\$61,500	02/22/94		\$61,500	\$61,500	04/30/94
CHESTNUT-CHATAHOOC	01/14/94	\$55,500	02/22/94		\$55,500	\$55,500	04/30/94
JEFFERSON CITY OF	01/13/94	\$220,000	04/01/94		\$195,000	\$195,000	04/29/94
DILLARD CITY OF	01/14/94	\$86,000	05/04/94		\$209,000	\$209,000	06/20/94
STEWART CO COMM	12/15/93	\$21,047	05/04/94		\$21,000	\$21,000	06/08/94
VIDALIA CITY OF	01/06/94	\$200,000	05/09/94		\$200,000	\$200,000	06/22/94
*TOTAL STATE GA		\$1,086,047			\$1,159,000	\$1,159,000	

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
DRIGGS CITY OF LEHIGH COUNTY ECIPDA /E CEN IDAHO	01/10/94 02/17/94 02/14/94	\$49,200 \$78,139 \$180,000	04/07/94 04/07/94 03/29/94	APP REC'D OBLIGATED OBLIGATED	\$49,200 \$78,139 \$180,000	\$26,000 \$180,000	00/00/00 07/01/94 06/09/94
*TOTAL STATE ID		\$307,339			\$307,339	\$206,000	
TWO RIVERS RCB	02/10/93	\$70,000	04/29/94	OBLIGATED	\$70,000	\$70,000	06/03/94
*TOTAL STATE IL		\$70,000			\$70,000	\$70,000	
POWELL'S VALLEY KENTUCKY HIGHLANDS	00/00/00 00/00/00		03/11/94 06/22/94		\$99,500 \$453,500	\$99,500 \$453,500	05/16/94 07/05/94
*TOTAL STATE KY					\$553,000	\$553,000	
GARRETT COUNTY COMM UNIV. OF MD/EASTERN SMITH ISLAND	01/13/94 05/23/94 02/17/94	\$134,700 \$70,000 \$80,100	05/27/94 06/10/94 04/29/94	OBLIGATED OBLIGATED OBLIGATED	\$134,700 \$70,000 \$120,000	\$137,000 \$15,000 \$155,000	02/13/95 07/11/94 07/11/94
*TOTAL STATE MD		\$284,800			\$324,700	\$307,000	
QUINCY TOWNSHIP GLADSTONE CITY OF ISABELLA CO TRANSP. MEICORP BUENA VISTA CHARTER	01/06/94 12/27/93 01/10/94 12/13/93 11/18/93	\$75,000 \$50,000 \$25,000 \$1,000,000 \$50,000	04/15/94 05/25/94 04/21/94 12/28/93 03/07/94	OBLIGATED OBLIGATED OBLIGATED OBLIGATED OBLIGATED	\$75,000 \$50,000 \$25,000 \$1,000,000 \$100,000	\$66,000 \$50,000 \$25,000 \$1,000,000 \$100,000	07/08/94 07/08/94 06/30/94 03/11/94 07/08/94
*TOTAL STATE MI		\$1,200,000			\$1,250,000	\$1,241,000	
MS BAND CHOCTAW IND	10/04/93	\$51,300	03/10/94	OBLIGATED	\$51,300	\$51,300	06/30/94
*TOTAL STATE MS		\$51,300			\$51,300	\$51,300	
CRESWELL, TOWN OF	07/06/93	\$134,765	10/07/93	OBLIGATED	\$100,000	\$100,000	04/27/94
*TOTAL STATE NC		\$134,765			\$100,000	\$100,000	

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
ND BAGG BONANZA FARM	04/09/92	\$221,000	01/31/94	PREAPP REJECT	\$212,220		00/00/00
ND ASSOC SOIL CONS	06/02/94	\$263,842	09/14/94	APP RECVD	\$515,600		00/00/00
TURTLE MT. BAND OF	06/09/93	\$450,000	03/28/94	APP REJECTED	\$563,600		00/00/00
ND APUC	02/08/94	\$250,000	02/23/94		\$250,000	\$250,000	06/13/94
*TOTAL STATE ND		\$1,184,842			\$1,226,020	\$250,000	
NH NEW ENGLAND CENTER	00/00/00		06/17/94	PREAPP SUSPND	\$50,000		00/00/00
NEW HAMPSHIRE	00/00/00		02/04/94	OBLIGATED	\$100,000	\$44,000	03/16/95
KEENE INDUSTRIAL	00/00/00		03/14/94		\$23,000	\$23,000	03/15/94
KEENE INDUSTRIAL	00/00/00		03/14/94		\$82,000	\$82,000	03/15/94
*TOTAL STATE NH					\$255,000	\$149,000	
NJ CEDARVILLE CO-OP	06/14/93	\$334,000	06/22/94	APP RECVD	\$229,000		00/00/00
*TOTAL STATE NJ		\$334,000			\$229,000		
OK WAYNOKA INDUSTRIAL	08/17/94	\$300,000	09/08/94	APP RECVD	\$98,000		00/00/00
*TOTAL STATE OK		\$300,000			\$98,000		
OR RURAL DEVELOPMENT	03/14/94	\$183,875	05/13/94	OBLIGATED	\$183,880	\$183,880	08/15/94
COQUILLE INDIAN	05/24/94	\$307,400	07/28/94		\$307,400	\$307,400	09/15/94
SALMON HARBOR	00/00/00		08/05/94		\$17,300	\$17,300	09/12/94
SWEET HOME CITY OF	04/07/94	\$495,000	06/28/94		\$495,000	\$495,000	09/16/94
*TOTAL STATE OR		\$986,275			\$1,003,580	\$1,003,580	
PR PRODUCIR, INC	12/07/93	\$250,000	04/29/94		\$531,508	\$395,000	06/29/94
*TOTAL STATE PR		\$250,000			\$531,508	\$395,000	
SC GEORGETOWN COUNTY	03/15/94	\$47,000	06/08/94	OBLIGATED	\$47,000	\$47,000	06/26/94
CHESTERFIELD, TOWN	02/17/94	\$27,000	03/23/94		\$26,800	\$26,800	05/23/94
*TOTAL STATE SC		\$74,000			\$73,800	\$73,800	

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
TX ETOWAH, CITY OF	02/12/93	\$100,000	01/18/94	OBLIGATED	\$100,000	\$100,000	07/07/94
*TOTAL STATE TX		\$100,000			\$100,000	\$100,000	
TX CALDWELL CO DEVEL, COLONIAS DEL VALLE,	08/25/93 09/28/93	\$500,000 \$500,000	02/18/94 01/25/94	OBLIGATED OBLIGATED	\$500,000 \$399,000	\$500,000 \$399,000	05/04/94 03/03/94
*TOTAL STATE TX		\$1,000,000			\$899,000	\$899,000	
UT SOUTHEASTERN UTAH	00/00/00		03/16/94	OBLIGATED	\$124,000	\$124,000	06/08/94
*TOTAL STATE UT					\$124,000	\$124,000	
VA STAUNTON CITY OF CARROLL COUNTY SOUTHWEST DEV. FIN.	11/18/93 00/00/00 03/31/94	\$411,400 \$500,000	03/24/94 07/08/94 06/23/94	OBLIGATED OBLIGATED OBLIGATED	\$411,400 \$175,500 \$500,000	\$411,400 \$146,800 \$500,000	05/04/94 09/23/94 08/05/94
*TOTAL STATE VA		\$911,400			\$1,086,900	\$1,058,200	
VI GOVERNMENT OF THE GOVERNMENT OF THE	00/00/00 00/00/00		06/27/94 06/27/94	OBLIGATED OBLIGATED	\$10,000 \$10,000	\$10,000 \$10,000	07/11/94 07/13/94
*TOTAL STATE VI					\$20,000	\$20,000	
VT CENTRAL VT ECONOMIC NORTHERN COMMUNITY VT STATE COLLEGES CHESTER, TOWN OF	00/00/00 00/00/00 00/00/00 00/00/00		12/24/93 12/27/93 08/02/94 12/24/93	APP WITHDRAWN	\$15,000 \$200,000 \$400,000 \$20,000	\$200,000 \$400,000 \$20,000	00/00/00 04/12/94 09/21/94 09/29/93
*TOTAL STATE VT					\$635,000	\$620,000	
WA GUILLEUTE TRIBE JAMESTOWN S'KALLAM LUMMI INDIAN FORKS, TOWN OF CENTRALIA, PORT OF	04/09/92 01/27/94 10/14/93 08/18/93 11/01/93	\$235,394 \$387,515 \$657,500 \$280,000 \$320,000	05/27/94 09/12/94 12/15/93 01/15/94 12/16/93	PREAPP WITHDRAWN OBLIGATED OBLIGATED	\$482,950 \$387,500 \$657,500 \$280,000 \$365,600	\$387,500 \$657,500 \$280,000 \$365,600	00/00/00 03/02/95 03/09/94 02/13/94 02/15/94
*TOTAL STATE WA		\$1,880,409			\$2,173,550	\$1,690,600	

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
WV RANDOLPH CO. DEV. LEWIS CO. CHAMBER KINGWOOD, CITY OF ADDISON, TOWN OF MOUNTAIN AQUACULTUR	12/20/93 04/12/94 09/28/93 05/10/94 03/31/94	\$93,000 \$30,000 \$95,369 \$75,000 \$45,000	06/30/94 05/18/94 12/20/93 06/16/94 05/10/94	APP RECVD APP RECVD OBLIGATED OBLIGATED OBLIGATED	\$93,000 \$30,000 \$95,000 \$75,000 \$45,000	\$75,000	00/00/00 00/00/00 00/00/00 06/20/94 00/00/00
*TOTAL STATE WV		\$338,369			\$338,000	\$75,000	
WY KEMMERER CITY OF THE MEANS FIRST EXT SHERIDAN, COUNTY OF	08/24/93 09/20/93 04/19/94	\$150,000 \$100,000 \$41,565	02/28/94 11/18/93 05/23/94	APP RECVD OBLIGATED OBLIGATED	\$80,000 \$99,000 \$41,500	\$99,000 \$41,500	00/00/00 03/22/94 11/23/94
*TOTAL STATE WY		\$291,565			\$220,500	\$140,500	
TOTAL		\$12,406,684			\$14,405,697	\$11,401,780	
RBEG PREAPPS FROM 10/01/93 TO 09/30/94							
CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
AL OZARK, CITY OF FORT DEPOSIT IDB NEW HOPE INDUSTRIAL HAMILTON, CITY OF	10/15/93 04/15/94 01/12/94 09/28/94	\$481,000 \$74,267 \$118,650 \$380,000	00/00/00 09/12/94 06/27/94 00/00/00	PREAPP NOTIFI OBLIGATED OBLIGATED OBLIGATED	\$67,500 \$118,600 \$200,000	\$67,500 \$118,600 \$200,000	00/00/00 09/22/94 07/11/94 03/01/95
*TOTAL STATE AL		\$1,253,917			\$186,100	\$386,100	
AR OZARK SMALL FARM	01/25/94	\$165,700	01/25/94	PREAPP WITHDRW	\$165,700		00/00/00
*TOTAL STATE AR		\$165,700			\$165,700		
AZ CITIZENS ISLAND NAVAJO NATION NAVAJO NATION NAVAJO NATION NAVAJO NATION CHICANOS POR LA	09/29/94 08/25/94 08/25/94 08/25/94 08/08/94 08/22/94	\$197,540 \$750,000 \$1,885,000 \$262,500 \$210,000 \$250,000	00/00/00 00/00/00 00/00/00 00/00/00 00/00/00 08/23/94	PREAPP DOC RE PREAPP DOC RE PREAPP DOC RE PREAPP DOC RE PREAPP DOC RE OBLIGATED		\$250,000 \$250,000	00/00/00 00/00/00 00/00/00 00/00/00 00/00/00 09/13/94
*TOTAL STATE AZ		\$3,555,040			\$250,000	\$250,000	

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
CA VALLEY RURAL INSTITUTE FOR KARUK TRIBE ETNA, CITY OF	05/20/94 03/06/94 07/21/94 02/18/94	\$250,000 \$203,000 \$201,400 \$188,200	00/00/00 00/00/00 00/00/00 04/22/94	PREAPP RECVD PREAPP RECVD PREAPP RECVD OBLIGATED	\$190,000	\$190,000	00/00/00 00/00/00 00/00/00 04/29/94
*TOTAL STATE CA		\$842,600			\$190,000	\$190,000	
DE HARRINGTON, CITY OF	06/30/94	\$67,080	00/00/00	PREAPP RECVD			00/00/00
*TOTAL STATE DE		\$67,080					
GA CHATSWORTH CITY OF	11/24/93	\$100,000	00/00/00	PREAPP REJECT			00/00/00
JASPER CITY OF	12/03/93	\$100,000	00/00/00	PREAPP REJECT			00/00/00
CLAYTON CITY OF	01/13/94	\$200,000	00/00/00	PREAPP REJECT			00/00/00
REYNOLDS CITY OF	01/18/94	\$140,000	00/00/00	PREAPP REJECT			00/00/00
THOMASVILLE CITY OF	01/14/94	\$34,000	00/00/00	PREAPP REJECT			00/00/00
CARROLL CO DEV AUTH	12/30/93	\$187,904	00/00/00	PREAPP WTHDRW			00/00/00
LAGRANGE DEV. AUTH	01/12/94	\$123,000	00/00/00	PREAPP WTHDRW			00/00/00
BLAIRSVILLE CITY OF	01/14/94	\$100,000	00/00/00	PREAPP WTHDRW			00/00/00
CLAYTON COUNTY	01/14/94	\$100,000	04/18/94		\$100,000	\$100,000	04/27/94
GRAEFORD TOWN OF	01/14/94	\$2,000	03/13/94		\$92,000	\$92,000	06/30/94
CARNESVILLE CITY OF	01/13/94	\$230,000	03/13/94		\$225,000	\$225,000	04/26/94
CHESAPEE-CHATHAM	01/14/94	\$51,500	03/22/94		\$61,500	\$61,500	04/20/94
CHESAPEE-CHATHAM	01/14/94	\$51,500	03/22/94		\$55,500	\$55,500	04/20/94
JEFFERSON CITY OF	01/13/94	\$230,000	04/01/94		\$195,000	\$195,000	04/29/94
DILLARD CITY OF	01/12/94	\$66,000	05/04/94		\$209,000	\$209,000	06/20/94
STEWART CO COMM	12/15/93	\$31,047	05/04/94		\$21,000	\$21,000	06/08/94
VIDALIA CITY OF	01/06/94	\$200,000	05/09/94		\$200,000	\$200,000	06/22/94
*TOTAL STATE GA		\$2,070,951			\$1,159,000	\$1,159,000	
IA CHEROKEE AREA ECONO	08/12/94	\$900,000	11/18/94	OBLIGATED	\$500,000	\$500,000	03/02/95
*TOTAL STATE IA		\$900,000			\$500,000	\$500,000	
ID DRIGGS CITY OF	01/10/94	\$49,200	04/07/94	APP RECVD	\$49,200		00/00/00
LEMHI COUNTY	02/17/94	\$78,139	04/07/94	OBLIGATED	\$78,139	\$26,000	07/01/94
ECIPDA /E GEN IDAHO	02/14/94	\$180,000	03/29/94	OBLIGATED	\$180,000	\$180,000	06/09/94
*TOTAL STATE ID		\$307,339			\$307,339	\$206,000	

CURRENT BORROWER NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
STATE -----							
KY UNIVERSITY OF KY -	07/08/94	\$500,000	00/00/00	OBLIGATED		\$500,000	09/19/94
*TOTAL STATE KY		\$500,000				\$500,000	
MD							
UNIV. OF MD(EASTERN	08/18/94	\$58,875	00/00/00	PREAPP RECVD			00/00/00
GARRETT COUNTY COMM	01/13/94	\$134,700	05/27/94	OBLIGATED	\$134,700	\$137,000	02/13/95
UNIV. OF MD(EASTERN	05/23/94	\$70,000	06/10/94	OBLIGATED	\$70,000	\$155,000	07/11/94
SMITH ISLAND	02/17/94	\$80,100	04/29/94	OBLIGATED	\$120,000		
*TOTAL STATE MD		\$343,675			\$324,700	\$307,000	
MI							
SUPERIOR RECYCLING	05/26/94	\$44,740	00/00/00	PREAPP SUSPND			00/00/00
GLADSTONE, CITY OF	01/04/94	\$267,600	00/00/00	PREAPP SUSPND			00/00/00
MILLINGTON VILLAGE	12/13/93	\$116,316	00/00/00	PREAPP SUSPND			00/00/00
MEMPHIS, CITY OF	11/10/93	\$175,000	00/00/00	PREAPP WITHDRW			00/00/00
QUINCY TOWNSHIP	01/06/94	\$75,000	04/15/94	OBLIGATED	\$75,000	\$66,000	07/08/94
GLADSTONE, CITY OF	12/27/93	\$50,000	05/25/94	OBLIGATED	\$50,000	\$50,000	07/08/94
ISABELLA CO TRANSP.	01/10/94	\$25,000	04/21/94	OBLIGATED	\$25,000	\$25,000	06/30/94
MEICORP	12/13/93	\$1,000,000	12/28/93	OBLIGATED	\$1,000,000	\$1,000,000	03/11/94
BUENA VISTA CHARTER	11/18/93	\$50,000	03/07/94	OBLIGATED	\$100,000	\$100,000	07/08/94
*TOTAL STATE MI		\$1,803,656			\$1,250,000	\$1,241,000	
MS							
MS BAND CHOCTAW IND	10/04/93	\$51,300	03/10/94	OBLIGATED	\$51,300	\$51,300	06/30/94
*TOTAL STATE MS		\$51,300			\$51,300	\$51,300	
ND							
ESMOND, CITY OF	08/22/94	\$355,000	00/00/00	PREAPP RECVD			00/00/00
BANK OF ND	07/19/94	\$1,000,000	00/00/00	PREAPP NOTIFI			00/00/00
ND INDIAN ARTS ASSN	04/13/94	\$243,842	00/00/00	PREAPP REJECT			00/00/00
ND ASSOC SOIL CONS	08/25/94	\$503,842	09/13/94	APP RECVD	\$243,800		00/00/00
GRAFTON, CITY OF	08/23/94	\$503,000	01/09/95	APP RECVD	\$500,000		00/00/00
ND APUC	02/08/94	\$250,000	02/25/94		\$250,000	\$250,000	06/13/94
*TOTAL STATE ND		\$2,467,842			\$1,013,800	\$250,000	
OK							
TOWN OF PERKINS	08/22/94	\$50,000	00/00/00	PREAPP NOTIFI			00/00/00
CHICKASAW NATION	09/12/94	\$90,000	12/06/94	APP RECVD	\$90,000		00/00/00
WAYNOKA INDUSTRIAL	08/17/94	\$300,000	09/08/94	APP RECVD	\$98,000		00/00/00
*TOTAL STATE OK		\$440,000			\$188,000		

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
OR GLOBAL FORESTRY	07/12/94	\$200,000	00/00/00	PREAPP NOTIFI			00/00/00
OR RURAL DEVELOPMENT	03/14/94	\$183,875	05/13/94	OBLIGATED	\$183,880	\$183,880	08/15/94
COQUILLE INDIAN	05/24/94	\$307,400	07/28/94		\$307,400	\$307,400	09/15/94
SWEET HOME CITY OF	04/07/94	\$495,000	06/28/94		\$495,000	\$495,000	09/16/94
*TOTAL STATE OR		\$1,186,275			\$986,280	\$986,280	
PR JUANA DIAZ VEGETABL	12/08/93	\$590,000	00/00/00	OBLIGATED		\$450,000	06/29/94
PRODUCIR, INC	12/07/93	\$250,000	04/29/94		\$531,508	\$395,000	06/29/94
*TOTAL STATE PR		\$840,000			\$531,508	\$845,000	
SC GEORGETOWN COUNTY	03/15/94	\$47,000	06/08/94	OBLIGATED	\$47,000	\$47,000	06/24/94
CHESTERFIELD, TOWN	02/17/94	\$27,000	03/23/94		\$26,800	\$26,800	05/23/94
*TOTAL STATE SC		\$74,000			\$73,800	\$73,800	
TN OAKLAND TOWN OF*	04/06/94	\$99,999	00/00/00			\$100,000	07/06/94
*TOTAL STATE TN		\$99,999				\$100,000	
VA STAUNTON CITY OF	11/18/93	\$411,400	03/26/94	OBLIGATED	\$411,400	\$411,400	05/04/94
SOUTHWEST DEV. FIN.	03/31/94	\$500,000	06/23/94	OBLIGATED	\$500,000	\$500,000	08/05/94
*TOTAL STATE VA		\$911,400			\$911,400	\$911,400	
WA WASH STATE UNIV.	08/04/94	\$50,000	00/00/00	PREAPP NOTIFI			00/00/00
GRAYS HARBOR PORT	11/08/93	\$2,000,000	00/00/00	PREAPP SUSPND			00/00/00
JANESDON S' KALLAM	01/27/94	\$387,515	09/12/94	OBLIGATED	\$387,500	\$387,500	03/02/95
GAREFIELD COUNTY	08/11/94	\$190,130	10/04/94	OBLIGATED	\$95,000	\$50,000	03/02/95
CENTRALIA, PORT OF	07/26/94	\$57,100	10/17/94	OBLIGATED	\$74,400	\$74,400	01/23/95
WA STATE DEPT AGRIC	06/30/94	\$245,000	00/00/00	OBLIGATED	\$245,000	\$245,000	01/23/95
LUMMI INDIAN	10/14/93	\$457,500	12/15/93	OBLIGATED	\$457,500	\$457,500	03/09/94
CENTRALIA, PORT OF	11/01/93	\$320,000	12/16/93		\$365,600	\$365,600	02/15/94
*TOTAL STATE WA		\$3,907,245			\$1,580,000	\$1,780,000	
WV RANDOLPH CO. DEV.	12/20/93	\$93,000	06/30/94	APP RECVD	\$93,000		00/00/00
LEWIS CO. CHAMBER	04/12/94	\$30,000	05/18/94		\$30,000		00/00/00
MOUNTAIN AQUACULTUR	09/20/94	\$32,000	10/12/94		\$32,000		00/00/00
FAIRMONT INDUSTRIAL	10/03/93	\$100,000	04/05/95	OBLIGATED	\$100,000	\$100,000	04/21/94

CURRENT BORROWER STATE	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
BIG FOUR PSD BUCKHANNON ADDITIONAL MOUNTAIN AQUACULTURE	05/20/94 06/28/94 03/10/94 03/31/94	\$48,000 \$200,000 \$75,000 \$45,000	00/00/00 00/00/00 06/16/94 05/10/94	OBLIGATED OBLIGATED OBLIGATED OBLIGATED	\$75,000 \$45,000	\$48,000 \$153,000 \$75,000	06/20/94 11/30/94 06/20/94 00/00/00
*TOTAL STATE WV		\$623,000			\$375,000	\$376,000	
WV SHERIDAN, COUNTY OF	04/19/94	\$41,565	05/23/94	OBLIGATED	\$41,500	\$41,500	11/23/94
*TOTAL STATE WV		\$41,565			\$41,500	\$41,500	
TOTAL		\$22,452,584			\$10,085,427	\$10,154,300	

RBEG APPLICATIONS
FROM 10/01/94 TO 3/13/95

CURRENT BORROWER STATE	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
IA CHEROKEE AREA ECONO	08/12/94	\$900,000	11/18/94	OBLIGATED	\$500,000	\$500,000	03/02/95
*TOTAL STATE IA		\$900,000			\$500,000	\$500,000	
ME EASTERN ME DEV CORP	10/13/94	\$500,000	11/01/94		\$500,000	\$500,000	11/09/94
*TOTAL STATE ME		\$500,000			\$500,000	\$500,000	
NC WAXHAM, TOWN OF	00/00/00		01/10/95	OBLIGATED	\$55,000	\$55,000	02/06/95
*TOTAL STATE NC					\$55,000	\$55,000	
ND GRAFTON, CITY OF ND DEPT AG	08/25/94 01/09/95	\$500,000 \$250,000	01/09/95	APP RECVD	\$500,000 \$250,000	\$250,000	00/00/00 01/24/95
*TOTAL STATE ND		\$750,000			\$750,000	\$250,000	

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
NH NEW ENGLAND CENTER	00/00/00		10/11/94		\$50,000		00/00/00
*TOTAL STATE NH					\$50,000		
OK CHICKASAW NATION	09/12/94	\$90,000	12/06/94	APP RECVD	\$90,000		00/00/00
*TOTAL STATE OK		\$90,000			\$90,000		
SC BERKELEY COUNTY	12/12/94	\$87,000	02/10/95	APP RECVD	\$87,000		00/00/00
*TOTAL STATE SC		\$87,000			\$87,000		
VA MBC DEVELOPMENT	12/23/94	\$50,000	12/23/94	OBLIGATED	\$50,000	\$50,000	02/15/95
*TOTAL STATE VA		\$50,000			\$50,000	\$50,000	
VT CONNECTICUT RIVER	02/08/95	\$100,000	02/23/95	OBLIGATED	\$100,000	\$100,000	03/07/95
*TOTAL STATE VT		\$100,000			\$100,000	\$100,000	
WA GARFIELD COUNTY, CENTRALIA, PORT OF	08/11/94 07/26/94	\$190,130 \$57,100	10/04/94 10/17/94	OBLIGATED OBLIGATED	\$95,000 \$74,400	\$50,000 \$74,400	03/02/95 01/23/95
*TOTAL STATE WA		\$247,230			\$169,400	\$124,400	
WV MOUNTAIN AQUACULTURE BIG FOUR PSD	09/20/94 00/00/00	\$32,000	10/12/94 11/04/94	OBLIGATED	\$32,000 \$13,000	\$13,000	00/00/00 11/04/94
*TOTAL STATE WV		\$32,000			\$45,000	\$13,000	
WY CAMPBELL COUNTY EDC	10/11/94	\$33,920	12/01/94		\$33,916	\$33,900	02/09/95
*TOTAL STATE WY		\$33,920			\$33,916	\$33,900	
TOTAL		\$2,790,150			\$2,430,316	\$1,626,300	

RBEG PREAPPS FROM 10/01/94 TO 3/13/95									
CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED		
AZ	PINAL COUNTY CITIES CHICAMOS POR LA MAVAJO NATION	10/13/94 12/23/94 10/12/94	\$40,702 \$750,000 \$83,543	00/00/00 PREAPP RECVD 00/00/00 PREAPP NOTIFI 00/00/00 PREAPP NOTIFI			00/00/00 00/00/00 00/00/00		
*TOTAL STATE AZ									
		\$874,245							
GA	CRANFORD COUNTY LINCOLN CO. WATER. TAYLOR COUNTY DEV	01/27/95 01/27/95 01/27/95	\$109,000 \$81,000 \$150,000	00/00/00 PREAPP NOTIFI 00/00/00 PREAPP NOTIFI 00/00/00 PREAPP NOTIFI			00/00/00 00/00/00 00/00/00		
*TOTAL STATE GA									
		\$340,000							
IN	WARREN TOWN OF PIERCETON, TOWN OF ARGOS, TOWN OF	11/18/94 12/05/94 11/02/94	\$200,000 \$200,000 \$129,152	00/00/00 PREAPP RECVD 00/00/00 PREAPP RECVD 00/00/00 PREAPP RECVD			00/00/00 00/00/00 00/00/00		
*TOTAL STATE IN									
		\$529,152							
ME	ANDROSCOGGIN VALLEY EASTERN ME DEV CORP	10/13/94 10/13/94	\$500,000 \$500,000	00/00/00 PREAPP RECVD 11/01/94	\$500,000	\$500,000	00/00/00 11/09/94		
*TOTAL STATE ME									
		\$1,000,000			\$500,000	\$500,000			
MI	FORT GRATIOT	12/30/94	\$328,000	00/00/00 PREAPP SUSPND			00/00/00		
*TOTAL STATE MI									
		\$328,000							
NC	INDIAN TRAIL	03/02/95	\$100,000	00/00/00 PREAPP RECVD			00/00/00		
*TOTAL STATE NC									
		\$100,000							
ND	ND APUC NORTH AMERICAN ND DEPT AG	02/09/95 01/09/95 01/09/95	\$250,000 \$85,000 \$250,000	00/00/00 PREAPP RECVD 00/00/00 PREAPP NOTIFI 01/09/95	\$250,000	\$250,000	00/00/00 00/00/00 01/24/95		
*TOTAL STATE ND									
		\$585,000			\$250,000	\$250,000			

CURRENT BORROWER STATE NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
NE BOONE COUNTY	10/27/94	\$61,500	00/00/00	PREAPP SUSPND			00/00/00
NORTHEAST NEBRASKA	10/28/94	\$100,000	00/00/00	PREAPP SUSPND			00/00/00
PLATTE COUNTY	11/14/94	\$20,000	00/00/00	PREAPP SUSPND			00/00/00
*TOTAL STATE NE		\$181,500					
OK CITY OF ATOKA	12/28/94	\$160,000	00/00/00	PREAPP RECVD			00/00/00
*TOTAL STATE OK		\$160,000					
SC BERKELEY COUNTY	12/12/94	\$87,000	02/10/95	APP RECVD	\$87,000		00/00/00
*TOTAL STATE SC		\$87,000			\$87,000		
TX NATIONAL COUNCIL OF HUGHES SPRINGS,	12/27/94 02/28/95	\$1,200,000 \$1,300,000	00/00/00 00/00/00	PREAPP NOTIFI PREAPP NOTIFI			00/00/00 00/00/00
*TOTAL STATE TX		\$2,500,000					
VA GRAYSON COUNTY	03/13/95	\$276,000	00/00/00	PREAPP RECVD			00/00/00
HECKLENBURG COUNTY	10/12/94	\$40,000	00/00/00	PREAPP NOTIFI	\$50,000	\$50,000	00/00/00
MBC DEVELOPMENT	12/23/94	\$50,000	12/23/94	OBLIGATED			02/15/95
*TOTAL STATE VA		\$366,000			\$50,000	\$50,000	
VT CONNECTICUT RIVER	02/08/95	\$100,000	02/23/95	OBLIGATED	\$100,000	\$100,000	03/07/95
*TOTAL STATE VT		\$100,000			\$100,000	\$100,000	
WA SKAMANIA CNTY,PORT	02/10/95	\$194,356	00/00/00	PREAPP RECVD			00/00/00
*TOTAL STATE WA		\$194,356					

CURRENT BORROWER NAME	DATE PREAPP	AMT PREAPP	DATE APP	CURRENT STATUS	AMT APP	AMOUNT OBLIGATED	DATE OBLIGATED
STATE							
WY	LARAMIE ECONOMIC CAMPBELL COUNTY EDC	12/06/94 10/11/94	\$94,650 \$33,920	00/00/00 PREAPP REJECT 12/01/94	\$33,916	\$33,900	00/00/00 02/09/95
*TOTAL STATE WY		\$128,570			\$33,916	\$33,900	
00	NAVAJO ARTS/CRAFTS	10/06/94	\$400,000	00/00/00 PREAPP REJECT			00/00/00
*TOTAL STATE 00		\$400,000					
TOTAL		\$7,873,823			\$1,020,916	\$933,900	

LOCAL TECHNICAL ASSISTANCE AND PLANNING GRANT PROGRAM

Question: The House has proposed to rescind the \$1.75 million appropriated for fiscal year 1995 in first-time funding for local technical assistance and planning grants. I see in the testimony that you are now completing regulations for the administration of this program. When will the regulations for local technical assistance and planning grants be finalized?

Answer: It is anticipated that the regulations will be published in the Federal Register soon.

Question: Given the fact that the program regulations are not currently in place and grant applications have not yet been submitted or approved, how reasonable is it to assume that any of the funds made available for these grants would be obligated in fiscal year 1995?

Answer. There have been numerous inquiries about the program from the public. The National Association of Development Organizations published an article about the program in the February 3, 1995 newsletter. Interested parties who have inquired about the program are expecting program information and regulations to be available by mid to late Spring. The program delivery system in place should be more than adequate to process, approve, and obligate applications to use all of the program funds before the end of the fiscal year.

ALTERNATIVE AGRICULTURAL RESEARCH AND COMMERCIALIZATION (AARC)

UNOBLIGATED FUNDS

Question: The House is proposing to rescind \$3.0 million of the \$6.5 million fiscal year 1995 appropriation for AARC. The House justifies this action on the basis that AARC has a \$2.5 million carryover balance from fiscal year 1994. Actually, I note from the budget justification that carryover is \$3.223 million. Why is the unobligated balance of funds being carried over from fiscal year 1994 so large? Why weren't these funds used in fiscal year 1994?

Answer: Of the amount carried forward from FY 1994 to FY 1995, approximately \$900,000 in cooperative agreements are close to being awarded. An additional \$800,000 in cooperative agreements were in the final stage of negotiation at the end of FY 1994. These projects, however, did not mature as expected. Also, the Board thought it judicious to reserve approximately \$1 million of available funding in order to meet high priority projects arising in fiscal year 1995.

RESCISSION

Question. What effect would the \$3.0 million proposed funding rescission have on AARC's program?

Answer. The rescission would reduce capital available in rural communities for commercializing new industrial uses from agricultural and forestry materials--with a multiplier effect. Each AARC Center dollar is matched by three dollars from the private sector, although only a 1:1 is required by law. The total lost investment would be \$12 million, not \$3 million. Over 1,000 new jobs may not be realized. Many of the projects funded by the AARC Center use excess commodities, and a reduction in funded projects could further exacerbate commodity surpluses and incur continued demand for program subsidies.

The Center is currently evaluating proposals requesting a total of \$32.6 million--demonstrating the strong demand for such projects. Reductions in the Center's ability to fund projects may

also mean an additional \$59.8 million in private funds will not be invested, that's the amount applicants have pledged toward proposed projects in FY 1995.

STATUS OF REVOLVING FUND

Question. Would you please give us a status report on the AARC revolving fund?

Answer. The authorizing legislation provides for the AARC Center's Revolving Fund to receive funds from various sources including appropriations, transfers, payments from products and services, fees and royalties, donations or contributions, and any other funds acquired by the Center. The Center has awarded 38 projects in the past two years.

On March 6, 1995, the AARC Center received its first installment payment from one of the companies in which it invested 1993 funds. The Leahy-Wolf Company of Franklin Park, Illinois uses crambe or rapeseed oil to lubricate concrete forms and serve as a release agent. The vegetable oil replaces polluting petroleum. The AARC Center invested \$70,000 in the company in 1993 and an additional \$100,000 in 1994 to assist the firm in its marketing efforts. The AARC Center receives a royalty on sales from Leahy-Wolf. This was the very first royalty check received by the AARC Center. It has been deposited in the revolving fund for use with other projects.

NEW LOAN PROGRAM

Question: A new \$25 million AARC loan program is requested as part of the Administration's proposed "greenbox" funding proposals for fiscal year 1996 to fulfill its commitment to increase agricultural promotional activities consistent with GATT. The budget justification indicates that this loan program is requested for the purpose of cooperating with the Foreign Agriculture Service in the development of alternative products for commercialization in targeted foreign markets. Why can't the AARC revolving fund be used to do this? Why is a new loan program being proposed?

Answer: The AARC revolving fund is used to make equity investments or to recover the Center's investment through a royalty agreement. The new "greenbox" loan program would complement the existing investment methods.

Question. Is there existing legislative authority for this proposed new AARC loan program? If not, is the Administration submitting a legislative proposal to the Congress to authorize this new program?

Answer. The AARC Center's existing legislation authorizes direct loans.

Question. Will you please give us more details about the new AARC loan program being proposed. Will it carry the same conditions as the existing AARC program in terms of requiring at least a 50% match from the private sector partner, etc.?

Answer. The money currently invested from the AARC Center's revolving fund is not subject to the terms of the Credit Reform Act. Funds are appropriated to the revolving fund on a dollar for dollar basis. Receipts from investments may be retained for future investment. The direct loan program, however, will be subject to credit reform. Only the amount of subsidy on the loans needs to be appropriated. Financing for the loans will be borrowed from the Treasury. Repayments will be returned to the Treasury.

Direct loan making terms and conditions have not yet been determined. It is expected, however, that they will be similar to existing conditions.

Question. The fiscal year 1996 budget requests a \$7.138 million appropriation to cover the subsidy costs of AARC's new \$25 million loan program and an additional \$500,000 to administer these loans. Why is the subsidy cost of this new loan program so high?

Answer. The subsidy expense associated with the proposed new direct loan program is 28.55 percent. In the absence of historical data, this rate was established based on loan programs with similar risk factors. Under the provisions of credit reform, this subsidy rate may be adjusted as actual historical data on the direct loan program performance is accumulated.

STAFFING AND OVERHEAD

Question. What are the staffing and overhead requirements of the AARC Center? Please provide a comparison of the cost of these requirements over the past five fiscal years with those proposed for fiscal year 1996. Please provide separate detail on any additional staff required to administer the new loan program proposed.

Answer. At this time, the AARC Center operates with six full time staff members, five in Washington and one in Kansas City. The six staff members are responsible for the program development, project activities--including due diligence and monitoring, and other administrative functions. The Board plans to continue to run the AARC Center with a very small staff, but as the number of projects grows, we anticipate a need for a small increase in staff.

As part of its authorizing legislation, the unexpended funds can be carried forward to the next fiscal year. The legislation also stipulates that the Center is authorized to utilize only 15 percent of the total amount of funds appropriated to handle "Activities"--Administrative (5 percent), Information Collection and Dissemination (5 percent) and other (5 percent). In years where there is a decrease in the appropriation level, both "Program" and Activity" funds are affected.

Information on funding available for administrative activities, overhead costs and staff years for the AARC revolving fund follows:

Alternative Agricultural Research and Commercialization Center Explanation of AARC Appropriated Funds 1992-1996

Fiscal Year	Total Appropriated Funds	Program Funds 85%	Funds 15% Allowable	AARC Center Overhead Cost	Staff Years
1992	\$4,500,000	\$3,825,000	\$675,000	\$248,875 Actual	1
1993	\$7,250,000	\$6,162,500	\$1,125,000	\$810,000 Actual	4
1994	\$9,000,000	\$7,650,000	\$1,350,000	\$1,072,000 Actual	6
1995	\$6,500,000	\$5,525,000	\$975,000	\$1,178,000 Estimated	6
1996	\$8,000,000	\$6,800,000	\$1,200,000	\$1,200,000 Estimated 1/	7

1/ Does not include direct loan program administrative funds of \$500,000.

PROJECTS

Question. Would you please provide a summary of each project assisted by AARC, indicating the purpose of the project, the private sector partner, the public and private funds committed to the projects, and the form of the payback arrangement and when the government will begin to receive a return on its investment. Also, please indicate how AARC assessed the job creation and rural development potential and the environmental effects of each of these projects.

Answer. The Center entered into 23 cooperative agreements in FY 1993 and in FY 1994. As part of the application process, the applicant must provide information about the impact of the project on the community including: the volume of agricultural or forestry material to be used; environmental and resource conservation impacts; potential to reduce Federal crop subsidies; export/import implications; replacement of non-renewable materials with renewable materials and jobs, both immediate and long term. The Center uses this information to assess the job creation and rural development potential and the environmental effects of each potential applicant. The time that the government will begin to recoup its investment varies with each investment. Given that most projects are for emerging industries and companies, the earliest any of them are anticipated to begin repayment is two years from the date of the agreement. However, a more realistic time frame, for many projects, is three to five years. Information on projects approved for funding in FY 1993 and FY 1994 follows:

ALTERNATIVE AGRICULTURAL RESEARCH AND COMMERCIALIZATION

SUMMARY OF REPAYMENT AGREEMENTS FOR 1993 PROJECTS

AFEX, Austin, TX

Refine lignocellulosic material to sugars, protein and lignin, for subsequent conversion of sugars to ethanol and other products.

AARC Funds: \$250,000

Cooperators Contributions: \$406,000

REPAYMENT AGREEMENT: 15 percent risk investment charge.

AG PROCESSING, Inc., Omaha, NE

Study to help determine the best available technology for the production of biodiesel.

AARC Funds: \$36,000

Cooperators Contributions: 9,000

REPAYMENT AGREEMENT: If they construct a biodiesel facility within five years.

AGRIGENETICS, San Diego, CA

Development of Lesquerella as a Domestic Source of Hydroxylated Oil

AARC Funds: \$776,110

Cooperators Contributions: \$1,267,000

REPAYMENT AGREEMENT: Royalty on seed.

AGRO-FIBERS, Angiola, CA - MS

Produce non-woven needle punched grass and flower mats from kenaf.

AARC Fund: \$800,000

Cooperators Contributions: \$3,100,000

REPAYMENT AGREEMENT: Interest.

ARKENOL Inc., Laguna Hills, CA

Commercialization of concentrated acid hydrolysis.

AARC Funds: \$1,000,000

Cooperators Contributions: \$7,000,000

REPAYMENT AGREEMENT: Interest

AMERICAN BIOFUEL -NATIONAL SOYDIESEL DEV. BOARD, Arlington,VA - Jefferson City, MO

Initial Biodiesel Emissions Testing.

AARC Funds: \$140,000

Cooperators Contributions: \$130,000

This project is a non-repayable grant.

BIOENERGY, Gainesville, FL

Develop the technology and equipment to demonstrate the ability to convert corn stover to ethanol by fermenting the pentose and other sugars derived from hemicellulose and to combine this technology with the production of ethanol from enzymatic hydrolysis of mixed waste paper.

AARC Funds: \$100,000

Cooperators Contributions: \$150,000

This project is a non-repayable grant.

BIOTECH R&D CORPORATION, Peoria, IL

Commercialize starch-encapsulated pest control formulations from corn.

AARC Funds: \$500,000

Cooperators Contributions: \$500,000

REPAYMENT AGREEMENT: Royalties.

CCT CORPORATION, Goodyear, AZ

Commercialize biological pesticide from cotton, corn, and sugar.

AARC Funds: \$170,530

Cooperators Contributions: \$186,000

REPAYMENT AGREEMENT: Interest.

FATS AND PROTEINS RESEARCH INSTITUTE, Bloomington, IL

Methyl Ester Commercialization Program.

AARC Funds: \$10,000

Cooperators Contributions: \$61,000

This project is non-repayable grant of \$10,000.

GRIDCORE SYSTEMS, INTERNATIONAL, Carlsbad, CA

Commercialize structural panels from kenaf.

AARC Funds: \$50,000

Cooperators Contributions: \$50,000

REPAYMENT AGREEMENT: Equity.

HOBBS BONDED FIBERS, Mexia, TX

Produce and market oil adsorbent products using low-grade wool.

AARC Funds: \$700,000

Cooperators Contributions: \$716,344

REPAYMENT AGREEMENT: Interest.

INTERNATIONAL LUBRICANTS, INC., Seattle, WA

Develop and manufacture oilseed derived telomers for use in the production of superior lubricants and plastics.

AARC Funds: \$480,000

Cooperators Contributions: \$490,000

REPAYMENT AGREEMENT: Equity.

INTERNATIONAL POLYOL, Redmond, WA

Continuous Hydrocracking of Corn Starch-Derived Glucose to Ethylene Glycol, Propylene Glycol and Glycerol.

AARC Funds: \$300,000

Cooperators Contributions: \$601,000

REPAYMENT AGREEMENT: Equity.

KENAF INTERNATIONAL, LTD., McAllen, TX

Commercialize kenaf for newsprint and fiber panels.

AARC Funds: \$100,000

Cooperators Contributions: \$100,000

REPAYMENT AGREEMENT: Interest.

LEAHY WOLF COMPANY, Franklin Park, IL

Commercialize a biodegradable concrete-release agent made from rapeseed oil.

AARC Funds: \$70,000

Cooperators Contributions: \$77,000

REPAYMENT AGREEMENT: Percent of sales.

MIDWEST GRAIN PRODUCTS, INC., Atchinson, KS

Commercialize biodegradable plastic products from wheat.

AARC Funds: \$818,000

Cooperators Contributions: \$850,000

REPAYMENT AGREEMENT: Interest and percent of sales.

NATIONAL CORN GROWERS', Aquinas Technology, St. Louis, MO

Develop and expand commercialization of the cooperator's ethanol based windshield washer.

AARC Funds: \$400,000

Cooperators Contributions: \$945,000

REPAYMENT AGREEMENT: Interest.

NATURAL FIBERS CORPORATION, Ogallala, NE

Commercial Production of Milkweed Floss and Ogallala Down Comforters and Pillows.

AARC Funds: \$150,000

Cooperators Contributions: \$1,050,000

REPAYMENT AGREEMENT: Equity.

PHENIX COMPOSITES, INC., Mankato, MN

Develop and Establish a State-of-the-Art Manufacturing System for the Commercialization of "New Stone".

AARC Funds: \$1,000,000

Cooperators Contributions: \$1,500,000

REPAYMENT AGREEMENT: Interest.

RODALE INSTITUTE/PENN STATE, Kutztown, PA

On Farm Compost Commercialization

AARC Funds: \$200,000

Cooperators Contributions: \$553,091

This project is a non repayable grant.

STRANDWOOD MOLDING, INC., Lake Linden, MI

Commercialize the new technology by turning lumber residues and poor-quality or small-diameter logs into precisely shaped furniture parts.

AARC Funds: \$315,000

Cooperators Contributions: \$2,155,770

REPAYMENT AGREEMENT: Interest.

WEYERHAESER PAPER CO., Springfield, OR

Commercialize waste straw to pulp.

AARC Funds: \$350,000

Cooperators Contributions: \$359,000

REPAYMENT AGREEMENT: Interest.

SUMMARY OF REPAYMENT AGREEMENTS FOR 1994 PROJECTS**AGRIBOARD (Fairfield, IA)**

Commercialize the use of stress-skin panels made from wheat straw and other agricultural and forestry materials in new home construction.

AARC Funds: \$ 175,000

Cooperators Contributions: \$ 175,000

REPAYMENT AGREEMENT: Equity.

THE UNIVERSITY OF ARIZONA (Tucson, AZ)

To establish a consortium of paper-industry companies to ultimately produce and market specialty papers using Hesperaloe fibers and to develop a revised commercial demonstration proposal for submission to the AARC Center.

AARC FUNDS: \$80,639

Cooperators Contributions: \$ 1.4 million

REPAYMENT AGREEMENT: Grant.

BIOPLUS (Ashburn, GA)

BioPlus is manufacturing both an agri-chemical carrier medium and a flushable/biodegradable cat litter from peanut hulls.

AARC Funds: \$ 300,000

Cooperators Contributions: \$ 300,000

REPAYMENT AGREEMENT: Percent of sales.

CASTOR OIL (Plainview, TX)

The object of this project is for the AARC Center to assist Castor Oil, Inc. in re-establishing castor oil as a domestic crop.

AARC Funds: \$ 700,000

Cooperators Contributions: \$ 1.2 million

REPAYMENT AGREEMENT: Royalty.

EARTHGRO INC. (Lebanon, CT)

Assist Earthgro in establishing a production, quality control and marketing system for a potting mix that is inoculated with micro-organisms that are suppressive to certain soil-borne pathogens.

AARC Funds: \$ 115,000

Cooperators Contributions: \$ 365,000

REPAYMENT AGREEMENT: Royalty.

ENVIRONMENTAL REMEDIATION (Jackson, MS)

Commercialize the use of specialty treated cotton seed lint for use as an oil absorbent and/or remediation technology.

AARC Funds: \$ 515,000

Cooperators Contributions: \$ 725,000

REPAYMENT AGREEMENT: Equity.

GRIDCORE SYSTEMS INTERNATIONAL (Carlsbad, CA)

This is additional funding for the expansion of Gridcore's production line.

AARC Funds: \$ 850,000

Cooperators Contributions: \$ 850,260

REPAYMENT AGREEMENT: Equity.

THE HUME COMPANY (Memphis, TN)

Commercial Development/Market Study Research for Household and Personal Care Products.

AARC Funds: \$ 15,800

Cooperators Contributions: \$ 23,000

REPAYMENT AGREEMENT: Interest.

INDIAN CREEK MESQUITE (Brownwood, TX)

Marketing and Commercialization of "light the bag" mesquite chunks as an alternative to charcoal.

AARC Funds: \$ 315,000

Cooperators Contributions: \$ 601,350

REPAYMENT AGREEMENT: Percent of sales.

INNOVATIVE BIOSYSTEMS, INC. (Moscow, ID)

Establish a production, quality control, and marketing system for this new and advanced biological fungicide that uses agricultural or forestry materials as a carrier.

AARC Funds: \$ 40,000

Cooperators Contributions: \$ 53,000

REPAYMENT AGREEMENT: Percent of sales.

INTERNATIONAL POLYOL, Redmond, WA

Continuous Hydrocracking of Corn Starch-Derived Glucose to Ethylene Glycol, Propylene Glycol and Glycerol.

AARC Funds: \$309,005

Cooperators Contributions: \$517,500

REPAYMENT AGREEMENT: Equity.

KP PRODUCTS (Albuquerque, NM)

Expand the commercial use of bonded paper made with kenaf fibers.

AARC Funds: \$ 100,000

Cooperators Contributions: \$ 350,000

REPAYMENT AGREEMENT: Equity.

LAS HOJAS (THE HUSK) PARTNERSHIP (Gretna, NE)

The partnership will establish a domestic source of tamale wrappers from U.S. grown corn husks--eliminating the need to import them from Mexico.

AARC Funds: \$ 40,000

Cooperators Contributions: \$ 40,000

REPAYMENT AGREEMENT: Percent of sales.

LEAHY-WOLF COMPANY (Franklin Park, IL)

The AARC Center's money is being used to help advertise their biodegradable concrete release agent.

AARC Funds: \$ 100,000

Cooperators Contributions: \$ 77,000

REPAYMENT AGREEMENT: Percent of sales.

MIDWEST BIOFUELS, Inc. (Overland Park, KS)

To assist Midwest Biofuels in marketing esterified oils and expanding the end use of such products.

AARC Funds: \$ 235,000

Cooperators Contributions: \$ 235,000

REPAYMENT AGREEMENT: Royalty.

NORTHERN STATE POWER-KAUFERT LABORATORY (Minneapolis, MN)

Will manufacture and field test a new type of utility pole called a "plypole."

AARC Funds: \$ 25,000

Cooperators Contributions: \$ 25,000

REPAYMENT AGREEMENT: If the "plypole" is determined to be unsuitable for commercialization, there will be no repayment.

NATURAL FIBERS CORPORATION (Ogallala, NE)

This is additional funding for the milkweed floss development and marketing.

AARC FUNDS: \$450,000

Cooperators Contributions: \$ 1,650,000

REPAYMENT AGREEMENT: Equity.

PRIMEBOARD, INC. (Wahpeton, ND)

The purpose of the investment is to assist the company in commercializing the use of wheat straw in particle board and medium density fiberboard.

AARC FUNDS: \$1,000,000

Cooperators Contributions: \$ 9,626,000

REPAYMENT AGREEMENT: Equity.

XYMAX 2001, INC. (Mankato, KS)

The AARC Center will assist the company in commercializing the use of specially treated wheat straw and recycled plastic to manufacture and market wood replacement products such as highway sign posts and railroad ties.

AARC FUNDS: \$575,000

Cooperators Contributions: \$ 750,000

REPAYMENT AGREEMENT: Equity.

OBJECT CLASSIFICATION

Question. Please provide an object class breakdown of AARC's funding for each of fiscal years 1994, 1995 and 1996. Please explain any object class decrease or increase proposed in fiscal year 1996 from the fiscal year 1995 level.

Answer. The majority of increases in administrative funding from FY 1995 to FY 1996 are attributable to a \$500,000 requested increase in administrative expenses and \$7,138,000 in subsidy in support of the proposed new direct loan program. This increase would provide for 5 additional staff years for support of the loan making and existing project monitoring functions as well as subsidize \$25 million in direct loans. An object class breakdown, comparing FY 1994 actual with FY 1995 and FY 1996 estimates follows:

OBJECT CLASSIFICATION (IN THOUSANDS OF DOLLARS)

Identification Code	12-4144-0-3-352	1994	1995	1996
Personnel Compensation:		<u>Actual</u>	<u>Est.</u>	<u>Est.</u>
11.1 Time Permanent		321	434	640
11.5 Other Personnel Compensation		5	5	10
11.8 Special Personal Services Payments		<u>100</u>	<u>100</u>	<u>100</u>
11.9 Total Personnel Compensation		426	539	750
2.1 Civilian Personnel Benefits		76	96	129
21.0 Travel and Transportation of Persons		157	160	290
22.0 Transportation of Things		18	5	11
23.3 Communications, Utilities and Miscellaneous Charges		34	37	45
24.0 Printing and Reproduction		15	16	30
25.1 Advisory and Assistance Services		30	15	115
25.2 Other Services		301	294	290
26.0 Supplies and Materials		5	6	10
31.0 Equipment		10	10	30
33.0 Investments and Loans		3,871	5,000	4,000
41.0 Grants, Subsidies, and Contributions		<u>2,464</u>	<u>3,545</u>	<u>9,938</u>
99.9 Total Obligations		7,407	9,723	15,638

 QUESTIONS SUBMITTED BY SENATOR KOHL

 TECHNOLOGY TRANSFER AND COOPERATIVE DEVELOPMENT
GRANT PROGRAM

Question: This committee in the past has identified the Cooperative Development Foundation (CDF) and its national network of centers for cooperative development as a recipient of funding under Section 2347. In fact, given tight budget constraints, the CDF approach has been cited by members of this committee, and others, as the best way to taking the scarce resources available and using them for measurable, regional economic development lined in a national approach.

In the first two fiscal years that the program has been funded, USDA has awarded roughly half of the funding to CDF and its centers. Do you agree that this is an innovative program that deserves to continue to be part of our national rural development strategy?

Answer: This program should continue to be part of our national rural development strategy. It is a program designed to help diversify rural economic development by promoting centers for technology transfer or cooperative development. These centers would foster development and commercialization of new services and products that can be produced or provided in rural areas, new processes that can be utilized in the production of products in rural areas, and new enterprises that can add value to on-farm production through processing or marketing. These activities are designed to develop cooperatives with the potential to enhance rural economic development.

Question: The jurisdiction over the Technology Transfer and Rural Development Grant Program has moved several times within USDA during the past few years. In just two years it has gone from the Extension Service, to RDA, to the Rural Business and Cooperative Development Service. Who will be administering this program in the future? Will this same agency be handling the letting of the fiscal year 1995 funds and the oversight of the funded projects?

Answer: The Rural Business and Cooperative Development Service will administer this program in the foreseeable future, handle funding of projects for fiscal year 1995, and will be responsible for the oversight of all previously funded projects under Rural Technology and Cooperative Development grants.

Question: In last year's legislative rule-making and again this year in the request for proposals published on February 24, USDA has used language and criteria for this program that is identical to that expressed for the EZ/EC program. The congressional intent for this program, expressed through both authorization and appropriations language, has been to fund cooperative economic development on a national scale. Is it the intent of USDA to use these funds instead for EZ/EC eligible locations exclusively? If so, how does the Department reconcile that decision with the clear congressional intent to the contrary?

Answer: The Department's intent in using Rural Technology and Cooperative Development Grants is to augment cooperative development on a national scale using expertise at cooperative development centers throughout the country to carry out the program. It is the intent of USDA to use these funds to meet legitimate expressed needs of people for the cooperative form of business wherever they may be located. This program is not a part of the EZ/EC initiative. EZ/EC is not mentioned in the February 24 program's Notice of Funding Availability (NOFA). The language and criteria are similar because of the nature of the problem being addressed.

Question: The Rural Performance Partnership Initiative (RPPI) announced in the Department's fiscal year 1996 budget submittal would merge this program into a "stream of funding" that would include other rural development programs. If the committee were to concur in the Department's request to combine funding under the RPPI, would that in any way jeopardize the ability of the centers created through the CDF from receiving funding?

Answer: We are exploring different ways that projects serving multi-State areas will be able to compete for funding in this program. We want to be sure that centers like the ones created through CDF can compete through a multi-State center or on their own in their respective States.

SUBCOMMITTEE RECESS

Senator COCHRAN. Our next hearing is going to be held 1 week from today at 10 a.m., in this room. Until then, the subcommittee stands in recess.

[Whereupon, at 11:34 a.m., Wednesday, March 8, the subcommittee was recessed, to reconvene at 10:02 a.m., Wednesday, March 15.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

WEDNESDAY, MARCH 15, 1995

**U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.**

The subcommittee met at 10:02 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.
Present: Senators Cochran, Gorton, Bumpers, and Kohl.

DEPARTMENT OF AGRICULTURE

STATEMENT OF EUGENE MOOS, UNDER SECRETARY, FARM AND FOREIGN AGRICULTURAL SERVICES

ACCOMPANIED BY:

DENNIS KAPLAN, DEPUTY DIRECTOR, OFFICE OF BUDGET AND PROGRAM ANALYSIS

DALLAS SMITH, DEPUTY UNDER SECRETARY, FARM AND FOREIGN AGRICULTURAL SERVICES

JIM SCHROEDER, DEPUTY UNDER SECRETARY, FARM AND FOREIGN AGRICULTURAL SERVICES

CONSOLIDATED FARM SERVICE AGENCY

STATEMENT OF GRANT B. BUNTROCK, ACTING ADMINISTRATOR

ACCOMPANIED BY:

KENNETH D. ACKERMAN, ACTING DEPUTY ADMINISTRATOR, RISK MANAGEMENT

LOU ANNE KLING, ACTING DEPUTY ADMINISTRATOR, FARM CREDIT PROGRAMS

FOREIGN AGRICULTURAL SERVICE

STATEMENT OF AUGUST SCHUMACHER, ADMINISTRATOR

ACCOMPANIED BY CHRISTOPHER GOLDTHWAIT, GENERAL SALES MANAGER

OPENING REMARKS

Senator COCHRAN. The hearing will please come to order.

Today we continue our hearings on the fiscal year 1996 budget request for the Department of Agriculture. We will be reviewing, specifically, the budget request of the Consolidated Farm Service Agency [CFSA] and the Foreign Agricultural Service [FAS].

We are happy to have as witnesses at our subcommittee hearing today Eugene Moos, Under Secretary for Farm and Foreign Agricultural Services; Grant Buntrock, Acting Administrator of the Consolidated Farm Service Agency; August Schumacher, Administrator of the Foreign Agricultural Service; and Dennis Kaplan, Deputy Director of USDA's Office of Budget and Program Analysis.

I will ask Mr. Moos to please introduce any others who we should have recorded as being here at the hearing, and then proceed with whatever comments you would like to make Mr. Secretary.

We have your written testimony. We appreciate having that, and it will be made a part of the record in full. You may proceed.

UNDER SECRETARY'S OPENING REMARKS

Mr. MOOS. Thank you very much, Mr. Chairman. We are pleased to appear before you this morning to discuss the 1996 budget proposals for the new Farm and Foreign Agricultural Service mission area of the Department of Agriculture.

With me today are two of my deputies, who I would like to introduce: Dallas Smith over here on the aisle, and Jim Schroeder, both Deputy Under Secretaries for this mission area.

You have already recognized Grant Buntrock, who is the Acting Administrator for our Consolidated Farm Service Agency. Next to Grant is Ken Ackerman, who is the Acting Deputy Administrator for Risk Management.

And sitting at the far end of the table, but certainly not the least, is Lou Anne Kling, who is the Acting Deputy Administrator for Farm Credit Programs. On my right here, between Mr. Schumacher and Mr. Kaplan, is Chris Goldthwait, who is our General Sales Manager.

As you have indicated, we have put forward statements. Each of the agencies has prepared a statement regarding its budget and program proposals for 1996.

And I would just like to take a few minutes, if I may, to summarize my own statement. And thank you very much for including all of this in the record.

Turning first to the domestic side, establishment of the CFSA is currently a major focus of the Department's reorganization and streamlining initiatives.

As you know, the CFSA merges programs and staff serving farmers through county offices and combines the farm credit programs of the former Farmers Home Administration, the Federal Crop Insurance Corporation, and the Agricultural Stabilization and Conservation Service.

The Conservation Reserve Program, our Agricultural Conservation Program, and the Emergency Conservation Program have been retained in the CFSA, while other former ASCS conservation programs have been combined with the former Soil Conservation Service to become a part of the new Natural Resources Conservation Service.

CFSA is in the forefront of the Department's efforts to streamline and improve its delivery system. Over the next 2½ years, over 1,000 county offices will be closed or consolidated in order to establish about 2,500 field office service centers.

We have as our target to close about 350 of those by the end of this fiscal year, in other words, by October 1.

The goal here is one-stop, farmer-friendly service. A key component of our effort is developing the InfoShare Program, which will provide for the redesign of business procedures and technology needed at the county level to make these one-stop centers work.

InfoShare will be supported with a combination of appropriated funds through Departmental Administration and other funds provided by the Commodity Credit Corporation and the NRCS.

The budget provides \$1 billion in total funding for salaries and expenses of the CFSA in 1996 for the administration of its programs. This is a net increase of \$47 million above the 1995 level.

Increased funding is necessary to meet the costs of implementing the new crop insurance program, one-time costs associated with the consolidation of field staffs, and pay and other personnel-related cost increases.

On the other side of the ledger the budget includes reductions in administrative overhead expenditures, an important result of the Department's streamlining effort.

In terms of total program resources, CFSA administers a \$3.2 billion farm credit loan program, a \$2.1 billion crop insurance program, nearly \$2 billion of conservation programs, as well as the domestic price and income support programs of the Commodity Credit Corporation.

CCC outlays for the commodity price and income support programs are highly variable due to the vagaries of weather and the uncertainty of foreign markets. Total net outlays over the last 10 years have ranged from almost \$26 billion in 1986 to less than \$7 billion in 1990.

The 1996 budget projects that CCC net outlays will increase slightly from the \$10.3 billion figure in 1994 to \$10.6 billion in fiscal 1995, but will decline to \$9.1 billion in fiscal 1996.

The projected decline in outlays in 1996 reflects lower costs for the feed grain program as 1995 crop yields are forecast to return to more normal levels, as well as reduced spending for our ad hoc disaster assistance as the crop insurance reform program is implemented effective with the 1995 crop.

With regard to the 1995 farm bill, the budget does not include specific proposals for the price and income support programs.

However, the President is recommending a reduction of \$1.5 billion in CCC outlays to be taken over the 3-year period of 1998 through the year 2000. Specific measures to achieve these targeted savings will be proposed at a later date.

The Conservation Reserve Program is the major conservation program administered by the CFSA. A total of about 36.4 million acres has been enrolled in that program since 1986.

The 1996 budget proposes that the cumulative enrollment in CRP reach 38 million acres by December 31, 1995, as statutorily mandated. The additional enrollment above the current 36.4 million acres would occur in the first quarter of fiscal 1996.

The estimated acreage in CRP will decline to about 33 million acres by the year 2000 and will decline further in subsequent years. The budget includes outlays for CRP rental and other costs of about \$2 billion annually.

The Department's reorganization has placed the farm credit and crop insurance programs under CFSA and is designed to facilitate improved coordination among the credit, risk management, conservation, and commodity support programs.

The 1996 budget maintains the farm credit programs at about the same levels as appropriated for 1995 and reflects the strong emphasis by the Department on unsubsidized guarantees of private sector loans. The 1996 budget provides for \$70 million in direct farm ownership loans and \$543 million for direct farm operating loans. For guaranteed loans the budget includes \$541 million for unsubsidized farm ownership loans and \$1.9 billion for farm operating loans.

Last year, as you will recall, the administration and Congress worked together to enact a major reform of the crop insurance program. The program is designed to incorporate benefits producers have traditionally received through ad hoc disaster payments into a basic level of catastrophic—CAT, if you will—insurance coverage and to encourage participation in the higher levels of coverage offered through buyup insurance by the private suppliers.

The Department is working very hard to implement the crop insurance reform so producers will have full coverage on their 1995 crops. It is anticipated that approximately 80 percent of all acreage will be insured either through the catastrophic coverage or through buyups.

Under the new program, all costs for 1996, except Federal salaries and expenses, are treated as mandatory spending. The reform legislation does, however, subject this spending to the appropriation process. Accordingly, the budget requests that such sums as necessary be appropriated.

BUDGET REQUEST FOR INTERNATIONAL ACTIVITIES

Turning quickly to our international programs, the Department recently revised its forecast of the value of U.S. agricultural exports in fiscal 1995 to a record \$48.5 billion. This is an increase of \$5 billion and an impressive 11 percent above last year's level, and is \$4.7 billion higher than the previous record set way back in 1981. U.S. agriculture will provide a \$20 billion positive contribution to the U.S. balance of trade this year.

We are heartened by our progress to date, but many challenges remain, and much work remains to be done if we are to take full advantage of the emerging export opportunities. The Department, in partnership with the private sector, will need to continue its work in identifying promising marketing opportunities overseas and in using the array of export promotion and market development tools at our disposal to meet our export expansion objectives.

Our 1996 budget proposals for the Department's international programs and activities reflect a commitment the administration made during the congressional consideration of the Uruguay round implementing legislation, a commitment to increase the program levels of greenbox and other GATT-consistent export promotion programs by the amount of \$600 million during the next 5 years in order to take full advantage of the market-opening benefits of that agreement.

For the CCC export credit programs, the budget proposes a program level of \$5.2 billion for short-term or GSM-192 export credit guarantees and \$500 million for intermediate-term GSM-103 export credit guarantees in 1996.

Included within the program level for GSM-102 guarantees are the two new credit activities, supplier credit guarantees, which are part of our greenbox commitment, and our facilities financing guarantee program.

The Uruguay Round Agreement on Agriculture provides for the export subsidy practices of agricultural exporting countries to be reduced over a 6-year period. The 1996 program levels for the Department's export subsidy programs reflect the first phase of those reductions. However, funding for the programs has been provided at the maximum levels which are consistent with the quantity and expenditure reduction commitments made under the Uruguay round.

For the Public Law 480 foreign food assistance programs, the budget approves a total program level of just over \$1 billion. This is expected to provide approximately 3.4 million metric tons of commodity assistance.

As a component of our greenbox proposals, a recommendation to expand the Department's foreign food activities through the Food for Progress Program is included in the budget. Beginning in 1995, the annual limitation on Commodity Credit Corporation funding for transportation and noncommodity costs of Food for Progress programming would be increased, thereby expanding the level of commodity assistance we are able to provide under this authority.

For the Market Promotion Program—that is the MPP—the budget includes proposed supplemental appropriations language to restore MPP to its fully authorized level of \$110 million in 1995. This increase is a component of the administration's greenbox proposals. For budget year 1996, it would continue the program at the \$100 million level.

For the salaries and expenses of the Foreign Agricultural Service, which includes the Office of the General Sales Manager, we are requesting appropriated funding of \$129.5 million. This is an increase of approximately 10 percent over the 1995 level.

Among the proposals is increased funding for a major expansion in FAS's overseas office structure and for a number of FAS market development activities, including the Cochran Fellowship Program.

The budget also provides funding for FAS to establish a sanitary and phytosanitary trade policy team to coordinate the efforts of USDA, other U.S. Government agencies, and the industry in resolving technical barriers to U.S. agricultural exports.

MEETING THE CHALLENGES AHEAD

Steps toward free trade and the growing demand for improved food products have provided us with a great challenge and even greater opportunity. There is no doubt that our ability to compete in world markets is the key to a bright future for American agriculture. To meet the challenge and to take advantage of the opportunity, however, I believe that the Government must continue to play a role. American farmers need help to match the efforts of

other governments in export markets and they need a safety net to assist in handling the vagaries of weather and fickle markets.

CFSA and FAS do precisely these things. Working hand in hand, CFSA and FAS administer programs that help our farmers compete and also to stabilize commodity availability, farm income, and consumer prices.

Many have suggested that we should change how we do business to become more efficient. In fact, CFSA and FAS are making significant changes. We are reorganizing, downsizing, and streamlining to improve program delivery and reduce program expenditures. These changes are difficult, but they are necessary. The result will be a USDA more farmer-friendly and more taxpayer-friendly as well.

In summary, Mr. Chairman, I would just like to say that this has been a very momentous year for American agriculture and for the representatives of American agriculture in the Congress.

We have passed two very important pieces of legislation in this last year, one, of course, being the Reorganization Act for the Department of Agriculture, and the other being the very important reform of our Federal crop insurance and ad hoc disaster programs.

That legislative activity comes at a time when we have seen record crops produced in the United States. We had record crops in every one of our major crops this year, with the exception of wheat.

At the same time that we have these record crops, we are seeing record exports. And we are very optimistic about the opportunities that lie ahead in terms of expanding agricultural exports as we look to the future.

We feel that this growing export demand this year is firmly based, particularly in the developing countries with huge populations where there is a sudden surge of economic growth.

There are a lot of pent-up expectations in those areas of the world for improved diets, and we think that there is a real future here for the growth of food and fiber demand around the world. The United States is well positioned to participate in supplying that growing demand. But we know that if we don't position ourselves well and become better organized, some other of the exporting countries will supply those growing needs. So we are here to work with you and to achieve that kind of an opportunity for American agriculture.

That would conclude my remarks, Mr. Chairman. We've got an impressive array of specialists and experts here this morning, and hopefully we will be able to address the questions that you may have, or perhaps other members of the panel will have.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Mr. Secretary. I commend you for the statement. And, again, thank you for your cooperation with our subcommittee. We have your complete statement and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF EUGENE MOOS

Mr. Chairman, Members of the Committee, I am pleased to appear before you this morning and to have the opportunity to discuss the 1996 budget and program proposals for the new Farm and Foreign Agricultural Services Mission Area of the Department. With me today are three officials from the Consolidated Farm Service Agency (CFSA)—Grant Buntrock, Acting Administrator; Kenneth Ackerman, Acting Deputy Administrator for Risk Management; and Lou Anne Kling, Acting Deputy Administrator for Farm Credit Programs. I am also accompanied by two representatives of the Foreign Agricultural Service (FAS)—August Schumacher, Administrator; and Christopher Goldthwait, the General Sales Manager. We also have with us Steve Dewhurst, the Department's Budget Officer.

Statements by the Administrators, providing details on their agencies' budget and program proposals for 1996, have already been submitted to the Committee. My statement will summarize the proposals, after which we will be pleased to respond to your questions.

CONSOLIDATED FARM SERVICE AGENCY

Establishment of the CFSA is currently a major focus of the Department's reorganization and streamlining initiatives. As you know, the CFSA merges programs and staffs serving farmers through county offices and combines the farm credit programs of the former Farmers Home Administration, the Federal Crop Insurance Corporation, and the former Agricultural Stabilization and Conservation Service (ASCS). Some conservation programs, including the Conservation Reserve Program, Agricultural Conservation Program, and Emergency Conservation Program, have been retained in CFSA. Other former ASCS conservation programs have been combined with the former Soil Conservation Service to form the Natural Resources Conservation Service (NRCS).

In terms of total resources, CFSA administers a \$3.2 billion farm credit loan program; a \$2.1 billion crop insurance program; nearly \$2.0 billion of conservation programs; as well as the domestic price and income support programs of the Commodity Credit Corporation (CCC). At the same time, CFSA is in the forefront of the Department's efforts to streamline and improve its delivery system. Over 1,000 county offices will be closed or consolidated over the next two and one-half years to form about 2,500 Field Office Service Centers. The goal is "one-stop" farmer friendly service. A key component of our effort is developing the InfoShare program which will provide for the business processes redesign and technology needed at the county level to make these "one-stop" centers work. InfoShare will be supported with a combination of appropriated funds through Departmental Administration, and other funds provided by CCC and NRCS.

CFSA SALARIES AND EXPENSES

The budget provides \$1.0 billion in total funding for salaries and expenses of the CFSA in 1996 for the administration of its programs. This is a net increase of \$47 million above the 1995 level. Increased funding is necessary to meet the costs of implementing the new crop insurance program; one-time costs associated with the consolidation of field staffs; and pay and other personnel-related cost increases. On the other side of the ledger, the budget includes reductions in administrative overhead expenditures, an important result of the Department's streamlining effort.

Staff-year ceilings for CFSA will be 7,475 Federal staff years and 12,560 non-Federal county office staff years for ongoing programs. These staff-year ceilings remain near their 1995 levels but are below those for 1994. Reorganization, implementation of new crop insurance programs, and possible revisions to the commodity programs, as a result of the 1995 Farm Bill, are expected to keep workload requirements heavy during 1996.

FARM CREDIT PROGRAMS

The Department's reorganization has placed the farm credit programs under CFSA and is designed to facilitate improved coordination between the credit programs and CFSA's risk management, conservation and commodity support programs. The 1996 budget maintains the farm credit programs at about the same levels as appropriated for 1995, and reflects the strong emphasis on unsubsidized guarantees of private sector loans. Since 1987, the emphasis has been on guarantees rather than direct loans. Guarantees have the advantages of including private lenders in the loan-making process, and placing the primary responsibility for servicing on the lender who makes the loan.

Further, guarantees can be provided at very little cost to the Government, which allows a significant level of support within the tight budget constraints we are facing. However, guarantees cannot completely replace direct loans. Beginning farmers and members of socially disadvantaged groups, in particular, may not have access to a private lender who is willing to make them even a guaranteed loan. Moreover, there are about 120,000 existing direct loan borrowers, and some of these borrowers require additional credit in order to stay in business. Until they are ready to graduate to private credit or guaranteed loans, direct loans are needed to properly service their accounts. The interest subsidy on direct loans makes these loans more affordable for limited resource producers.

The 1996 budget provides for \$70 million in direct farm ownership loans and \$543 million for direct farm operating loans. The amount budgeted for direct farm operating loans is somewhat higher than the \$500 million appropriated for 1995. The Administration recognizes the demand for these loans is likely to exceed the budgeted amounts. However, an increase in direct loan authority is contrary to established policy of shifting to guaranteed loans. For guaranteed loans, the budget includes \$541 million for unsubsidized farm ownership loans, and \$1.9 billion for farm operating loans (\$1.7 billion unsubsidized and \$200 million subsidized).

Credit sales of farm properties were not provided for in the 1995 Appropriations Act. As a result, the Department has not been able to meet statutory mandates that certain applicants, including former owners and operators, beginning farmers, and members of socially disadvantaged groups, be given priority in the sale of property acquired through foreclosures and other such actions. Because of the backlog of applications, and the limited amount of funding available for the regular farm ownership program, it has been difficult to use that program to make these sales. Therefore, we are requesting separate funding of \$45 million for this activity in 1996.

RISK MANAGEMENT

Last year, the Administration and Congress worked together to enact a major reform of the crop insurance program. The program is designed to incorporate benefits producers have traditionally received through ad hoc disaster payments into a basic level of catastrophic (CAT) insurance coverage, and to encourage program participation in the higher levels of coverage offered through buy-up insurance. The reform legislation was passed with strong bi-partisan support and leadership from members of Congress, and the partnership of the private insurance industry.

The Department is working very hard to implement the crop insurance reform so that producers will have coverage on their 1995 crops. For the first time, CAT coverage is required in order to participate in the Department's price support, certain conservation, and farm credit programs. Under the new program, producers can obtain CAT coverage at no cost, except for a processing fee of \$50 per policy. This coverage guarantees them 50 percent of normal yield, valued at 60 percent of market price. It is anticipated that approximately 80 percent of all acreage will be insured either through CAT coverage or through buy-ups. Insurance will be offered for all price support crops and about 150 specialty crops and varieties.

Producers may also buy up, in which case the Government subsidizes the premium at a level equivalent to a CAT coverage increased from 60 percent to 75 percent of market price, and pays all the delivery costs. While CAT coverage is available either through a USDA field service center or a private insurance company, buy-up coverage is available only through a private insurance company.

Where CAT coverage is not available, producers will be eligible for non-insured assistance payments (NAP). Under NAP, producers will also be guaranteed 50 percent of production at 60 percent of price. However, payments will be made only when there are area-wide (usually a county or more, but not necessarily limited to county borders) losses of 35 percent or more.

For 1996, the budget provides full funding for continuation of the program into the 1996 crop year. Under the new program all costs for 1996, except Federal salaries and expenses, are treated as mandatory spending. The reform legislation does, however, subject this spending to the appropriations process. Accordingly, the budget requests that "such sums as necessary" be appropriated. Such an appropriation, rather than a specific amount, avoids the risk of underestimating certain program costs, particularly indemnities, which are subject to variations in weather and other conditions. Federal salaries and expenses for crop insurance program activities are included in the salaries and expenses appropriations request for CFSA.

CONSERVATION PROGRAMS

The Conservation Reserve Program (CRP) is the major conservation program administered by CFSA. CRP offers producers annual rental payments, usually for a

10-year period, to remove highly erodible cropland and other environmentally sensitive land from production. Participants also receive cost-share assistance to establish cover. A total of about 36.4 million acres has been enrolled in the program since 1986. This program has produced significant environmental and economic benefits. Therefore, in order to maintain and enhance the benefits of CRP, the Administration has initiated action to ensure CRP contracts can be modified and extended to target environmentally sensitive acres, making the program even more effective.

The 1996 budget proposes that the cumulative enrollment in CRP reach 38 million acres by December 31, 1995, as statutorily mandated. The additional enrollment from the current 36.4 million acres would occur in the first quarter of fiscal 1996. The estimated acreage in CRP will decline to about 33 million acres by the year 2000 and will decline further in subsequent years. The budget includes outlays for CRP rental and other costs of about \$2 billion annually. These expenses are partially offset by decreased CCC payments as a result of the higher prices expected to occur as a consequence of these acres being enrolled in CRP.

The budget request does reflect the provisions of the December 14, 1994, announcement by the Secretary that in addition to providing an opportunity to modify and extend their contracts upon maturity, all CRP participants will be allowed the opportunity during calendar year 1995 to request an early release from their contracts. This early release will enable the Department to retarget CRP by replacing existing acreage with more environmentally sensitive acres under 10-year contracts. We estimate 4 to 5 million acres will be affected by the early release and about 70 percent of expiring contracts will be extended. This assumption is consistent with results of previous surveys of CRP participants, coupled with the expectation that the provisions of the December announcement regarding reevaluation of current CRP rental rates and modification of acreage under contract will encourage extensions.

The new enrollments are to be targeted to more environmentally sensitive acres using criteria such as those used for the most recent CRP enrollments. The proposed plans for CRP will enhance the environmental and related benefits from the program, as well as contribute significantly toward strengthening commodity prices and farm income.

CFSAs also provides cost sharing to landowners to restore and protect agricultural land and water resources under the Agricultural Conservation Program (ACP) and to assist in rehabilitating farmland damaged by natural disasters under the Emergency Conservation Program. Funding for ACP is proposed at \$50 million for 1996, which is half that of 1995.

PRICE AND INCOME SUPPORT PROGRAMS FOR FARMERS

CCC outlays for the commodity price and income support programs are highly variable due to the vagaries of weather and the uncertainty of foreign markets. Total net outlays over the last 10 years ranged from almost \$26 billion in 1986 to less than \$7 billion in 1990. The variability in outlays reflects the intended role of CCC programs to moderate the effects of wide fluctuations in agricultural commodity markets on farm income and commodity prices.

The 1996 budget projects CCC net outlays will increase slightly from \$10.3 billion in 1994 to \$10.6 billion in 1995, and will decline to \$9.1 billion in 1996. In 1995, the higher outlays for feed grains due to the record crop yields in 1994 are largely offset by lower outlays for the cotton program and for disaster assistance. For 1996, the projected decline in outlays reflects lower costs for the feed grain program as 1995 crop yields are forecast to return to more normal levels, as well as reduced spending for ad hoc disaster assistance as crop insurance reform is implemented effectively with the 1995 crop.

These outlay estimates reflect program reforms included in the Food Security Act of 1985, as well as reductions in payment acres, increased marketing assessments, and other provisions of the Food, Agriculture, Conservation, and Trade (FACT) Act of 1990 and the Omnibus Budget Reconciliation Act of 1990. Legislation in 1993 phased out the wool and mohair program, and provisions in the 1993 budget reconciliation legislation reduced payments on land idled under annual conservation programs. In addition, provisions of recent appropriations acts have prohibited subsidy payments for honey producers in fiscal years 1994 and 1995.

Budget estimates for the outyears also reflect significant growth in demand for farm products as a direct result of the implementation of regulations expanding the use of ethanol, and the recent enactment of legislation implementing the North American Free Trade Agreement and the GATT Uruguay Round Agreement. Finally, additional signups and extension of existing contracts under the CRP will also

contribute to stronger crop prices and reduced spending for price and income support.

Declines in actual outlays since the early and mid-1980s are evidence of the reforms which have been made over the past several years. Average annual CCC outlays are currently projected to decline from \$16 billion for the period 1986–1990 to \$11 billion for the period 1991–1995, and to less than \$8 billion for the period 1996–2000 with no changes in current law. The farm support programs stand out as a prime example of where there have been real spending reductions in the entitlement area in recent years.

The 1996 budget reflects proposed appropriations language to reduce spending by \$60 million by prohibiting assistance to producers under the Livestock Feed Programs on losses for which coverage is available under the new crop insurance program. Finally, with regard to the 1995 Farm Bill, the budget does not include specific proposals for the price and income support programs. However, the President is recommending a reduction of \$1.5 billion in CCC outlays to be taken over the 3-year period 1998–2000. Specific measures to achieve these targeted savings will be proposed at a later date.

FOREIGN AGRICULTURAL SERVICE

Mr. Chairman, as you and members of the Committee are aware, the Department recently revised its forecast of the value of U.S. agricultural exports in fiscal 1995 to a record \$48.5 billion level. This is an increase of \$5.0 billion—an impressive 11 percent—above last year's level, and is \$4.7 billion higher than the previous record set in 1981. Equally positive, the increases are broad-based with gains projected for bulk commodities, as well as meats, fruits, vegetables and other high value products. With these gains, U.S. agriculture will provide a \$20 billion positive contribution to the U.S. balance of trade this year.

While one must necessarily be cautious in assessing year-to-year changes of this nature, 1995 does mark the fourth consecutive year of growth in the value of U.S. agricultural exports. These gains confirm what we believe will be unprecedented opportunities for the expansion of U.S. agricultural exports through the end of this decade and into the next.

These emerging opportunities are in large measure the result of efforts the United States has been making since the mid-1980s to enhance our export competitiveness and develop new markets overseas. These efforts include the reforms we have made in our domestic farm programs, beginning with the Food Security Act of 1985, which have made those programs more market-oriented and responsive to international market conditions. They also include the arduous, but ultimately successful efforts to secure greater discipline in agricultural trading practices and improved market access through the GATT Uruguay Round Agreement and the North American Free Trade Agreement. Finally, the unprecedented level of export promotion activities undertaken by the Department as a result of new programs and authorities provided in both the Food Security Act of 1985 and the FACT Act of 1990 have also assisted in laying the groundwork for future export promotion and market growth overseas.

We are heartened by our progress to date, but many challenges remain and much work remains to be done if we are to take full advantage of the emerging export opportunities. We will, for example, need to monitor closely the actions of other countries as they implement the Uruguay Round Agreement on Agriculture to ensure they meet commitments to liberalize trading practices and increase market access. We will also need to actively participate in the new World Trade Organization and the establishment of its Committees on Agriculture and on Sanitary and Phytosanitary Standards.

Equally important, the Department in partnership with the private sector will need to continue its work in identifying promising market opportunities overseas and in using the array of export promotion and market development tools at our disposal to meet our export expansion objectives. This is critical for the simple reason that the Uruguay Round Agreement will reduce, but not eliminate, the export subsidies and other unfair trade practices of competitor countries. Consequently, the expanding international marketplace will remain highly competitive.

Our 1996 budget proposals for the Department's international programs and activities have been developed with those opportunities—and challenges—in mind. They are designed to provide the resources necessary to build on the progress we have made in recent years and to continue our commitment to export expansion. These proposals also reflect a commitment the Administration made during congressional consideration of the Uruguay Round implementing legislation to increase the program levels of "greenbox" and other GATT-consistent export promotion programs

by \$600 million during the next five years in order to take full advantage of the market-opening benefits of that agreement. Our proposals meet that commitment.

For the CCC export credit programs, the budget proposes a program level of \$5.2 billion for short-term (GSM-102) export credit guarantees and \$500 million for intermediate-term (GSM-103) export credit guarantees in 1996. Included within the program level for GSM-102 guarantees is \$100 million for a new credit activity—supplier credit guarantees, which are being proposed as a component of the Administration's "greenbox" commitment. Under this activity, CCC will guarantee payment by foreign buyers of U.S. agricultural commodities and products which are sold by U.S. suppliers on a deferred payment basis. Supplier credit guarantees are expected to be particularly useful in facilitating sales of high value products, which are the fastest growing component of U.S. agricultural exports.

The budget also proposes that \$100 million of facilities financing guarantees be made available in 1996 as a component of the GSM-102 program. Under this activity, CCC will provide guarantees for the establishment and improvement of facilities designed to address infrastructure barriers to increasing sales of U.S. agricultural products. To be eligible for guarantee coverage, projects must improve the handling, marketing, storage, or distribution of imported agricultural commodities and products.

With respect to the Department's export subsidy programs, the Uruguay Round Agreement on Agriculture provides for the export subsidy practices of agricultural exporting countries to be reduced over a 6-year period. For the United States, reductions in the quantities of products exported under our subsidy programs will be carried out on a July-June basis, beginning July 1, 1995, while the reductions in expenditures for export subsidies will be carried out on an October-September basis, beginning October 1, 1995. Consequently, the 1996 program levels for the Department's export subsidy programs—the Export Enhancement Program, Dairy Export Incentive Program, and Sunflower and Cottonseed Oil Programs—reflect the first phase of those reductions. However, funding for the programs has been provided at the maximum levels which are consistent with the quantity and expenditure reduction commitments.

For the Public Law 480 foreign food assistance programs, the budget proposes a total program level of just over \$1.0 billion. This is expected to provide approximately 3.4 million metric tons of commodity assistance. Proposed rescissions in 1995 funding for Titles I and III are also included in the budget. The proposed reductions in both 1995 and 1996 are necessitated by constrained spending targets for the U.S. international programs and the need to accommodate increased expenditures for higher priority activities.

However, the budget does recommend an expansion in the Department's foreign food aid activities through the Food for Progress Program. Under this program, U.S. agricultural commodities are provided to developing countries and emerging democracies which have commitments to introduce and expand free enterprise in their agricultural sectors. As a component of our "greenbox" proposals, the budget proposes that beginning in 1995 the annual limitation on CCC funding for transportation and other non-commodity costs of Food for Progress programming be increased. This action will facilitate an expansion in the level of commodity assistance we are able to provide under the program.

The Market Promotion Program provides cost-share assistance to nonprofit agricultural trade organizations, State regional trade groups, and private companies which carry out export promotion activities overseas. The program is particularly useful for promoting exports of high value products which comprise approximately 80 percent total annual funding. The budget includes proposed supplemental appropriations language to restore MPP to its fully authorized level of \$110 million in 1995; this increase is a component of the Administration's "greenbox" proposals. For 1996, the budget continues the program at the \$110 million level.

FAS SALARIES AND EXPENSES

For the Foreign Agricultural Service, which includes the Office of the General Sales Manager and administers the Department's international programs, we are requesting appropriated funding of \$129.5 million. This is an increase of \$11.6 million or approximately 10 percent over the 1995 level. Most components of the increase in FAS direct funding contribute to meeting the Administration's "greenbox" commitment and are intended to bolster the agency's capabilities and resources to work with the private sector, as well as State Departments of Agriculture, in carrying out export promotion and foreign market development activities.

Among the proposed increases is funding for a major expansion in FAS's overseas office structure. The budget provides for FAS to open three new counselor/attache

posts and to expand four others. Similarly, the budget provides for the opening of six new Agricultural Trade Offices and the expansion of two others. These offices are to be located in key overseas markets which FAS estimates have an aggregate export expansion potential of more than \$3 billion.

Increased funding is also proposed for a number of FAS market development activities; our proposals provide for an expansion in the Cochran Fellowship Program and FAS trade show and trade mission activities, as well as a partial restoration of funding for the Foreign Market Development Cooperator Program. Funding is also requested to expand the Federal/State Market Improvement Program (FSMIP), under which matching grants are provided to State Departments of Agriculture to improve agricultural marketing systems. The additional funding will be used to develop innovative marketing techniques for use in international agricultural markets and to improve State expertise in providing services to agricultural businesses which seek to enter export markets.

The budget also provides funding for FAS to establish a sanitary and phytosanitary (SPS) trade policy team. The new SPS unit will coordinate the efforts of USDA, other U.S. Government agencies, and U.S. industry in resolving technical barriers to U.S. agricultural exports before they become trade policy issues and in the development of SPS standards by international standards-setting organizations. The unit will also have the capability to respond to SPS barriers on an emergency basis.

Finally, the budget includes additional funding to meet increased operating expenses at FAS's existing overseas posts, enhanced training opportunities for the agency's marketing specialists, pay increases and domestic inflation, and staffing for the new CCC export credit guarantee initiatives. Offsetting these increases are reductions in funding for agency administrative expenses and staffing to administer the Public Law 480 Title I program.

This concludes my statement, Mr. Chairman. We will be pleased to answer the questions you and other members of the Subcommittee may have regarding our programs and budget proposals.

REORGANIZATION

Senator COCHRAN. Mr. Secretary, you are, as you say in the statement, at the forefront of the reorganization effort. So much of the change that is occurring in reorganization is under the jurisdiction of the part of the Department for which you are responsible.

I wonder if you could give us an early reaction to how it is going. I know that there is always some trauma associated with reform of this magnitude, particularly as it affects county and regional offices throughout the country, as well as the Department's offices here in Washington.

Is it being accepted, pretty much, throughout the Department, at least that part that is under your jurisdiction? Do you think it will proceed or are you going to come back and say, "wait a minute, we need to change some things"?

Mr. MOOS. Well, reorganization and downsizing are disruptive and certainly a cause of great concern among the personnel of the Department of Agriculture. We do feel that we are making very good progress in this regard.

We are trying to be as sensitive as we possibly can be to the personal concerns of USDA employees as we go through this reorganization effort.

We are also very focused on trying to do our best to continue to deliver the services to American farmers and to the other consumers of the services of the Department of Agriculture.

Whether we will have enough budgetary support and sufficient resources to do this job as well as we hope we can do it, time will tell. But we know that we are going to be under tremendous pressure in that regard.

We have some county offices which are overstaffed. We have some county offices which are understaffed. Up until now we have had a hiring freeze, a personnel freeze. But now we are beginning to make some of the needed adjustments.

I would like to turn to our CFSA administrator for some additional comments. As I mentioned, this is a very disruptive process, but it is a necessary process to restore public confidence and respect for the actions in the Department of Agriculture and we are dedicated to making it work. Grant.

STATEMENT OF GRANT B. BUNTROCK

Mr. BUNTROCK. Thank you. Mr. Chairman.

To add to Mr. Moos' comments, I might tell you that in these past few months of reorganization at the Department, at the national level as well as at the county level, in dealing with crop insurance reform and other changes, I have come to appreciate fully the commitment to do more with less. We have been doing a lot of that in the last few months.

Without getting into all of the specific numbers, I would just make a couple of comments at this point. We did begin, as intended by the former Secretary, Mr. Espy, at the national level. At this point in time we have basically pulled the agricultural credit function of the former Farmers Home Administration, together with the risk management activities of the Federal Crop Insurance Corporation, and the commodity programs of the former ASCS under one umbrella at the national office. We are currently functioning under a single delivery system established as a communication link to all of the States and counties.

Now, at the field level, under this type of operation we are still continuing the day-to-day activities of the agricultural credit arm under the daily supervision of the former Farmers Home State Director, with all of the other activities being carried out under the CFSA Director. But at the national level, it is all pulled together.

Of course, at the national level there are some logistics to deal with. As we pull all the components of the CFSA together and operate as one unit from six different locations in the Washington area, we are getting into some logistical problems, which we are working on.

However, we have consolidated the management of each of the former agencies, and we are now just at the early stages of moving employees together in one area, locationwise. It will be very, very helpful when that is accomplished. We are very close to doing that for upper level management, probably within the next week or so. That will make it easier to function.

At the field level, of course, we have called upon what we refer to in the field delivery system as the Food and Agriculture Council [FAC], that is, the agriculture heads from each of the Federal agencies, to bring together a State plan, which has been submitted to the national office. Based on those plans, we set up implementation schedules to complete the merging and closing of several locations throughout all of the States. The implementation schedule is ambitious, but I believe that we will get most of it done as indicated.

Obviously, we are in the early stages of this effort in which we have asked for approximately 15 percent of the mergers to occur by the end of this month. We are going to come close to that.

Now, admittedly, these earlier county office closings and mergers have been the easier ones where we have had leases expire, the units are smaller, and so on. It has gone on with very little disruption in these early ones that we have done.

We plan to complete an additional 30 percent of these slated mergers and closings by the end of this fiscal year and then complete that task in 1997.

So that is kind of a thumbnail sketch of what the plan is and where we are.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Mr. Buntrock. We have your complete statement and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF GRANT B. BUNTROCK

Mr. Chairman and Members of the Subcommittee, I am pleased to present the fiscal year 1996 budget for the Consolidated Farm Service Agency—CFSA. It is my privilege to appear before you as the first representative of this new agency. While our reorganization and streamlining efforts are not complete, significant progress has been achieved since the Department of Agriculture Reorganization Act of 1994 was signed into law last October. The budget I am presenting today is the first fully consolidated budget of the CFSA, reflecting all mission areas that the agency encompasses: price support and related programs of the Commodity Credit Corporation, Federal crop insurance, the farm credit programs of the Agricultural Credit Insurance Fund, and several important conservation programs. I would like to highlight the budgets for all of these areas and then summarize our request for administrative expenses to support these varied activities.

CONSERVATION

Under the Reorganization Act, certain conservation and environmental programs of the former Agricultural Stabilization and Conservation Service were transferred to the new Natural Resources Conservation Service. Other such programs—the Conservation Reserve Program, Agricultural Conservation Program, and Emergency Conservation Program, along with the Dairy Indemnity Program—were legislatively designated to be administered by the CFSA. I would like to discuss each program in turn.

Conservation Reserve Program

The Conservation Reserve Program—CRP—was mandated by the Food Security Act of 1985, extended and modified by the Food, Agriculture, Conservation, and Trade Act of 1990 (FACT Act), and further amended by the Omnibus Budget Reconciliation Act of 1993 (OBRA). Its primary objective is to help farmers achieve the environmental benefits of reduced erosion, improved water quality and wildlife habitat, and to address other environmental concerns by planting trees, establishing riparian buffer strips, and protecting environmentally sensitive areas such as areas surrounding wellheads. The program is available in all 50 States, Puerto Rico, and the Virgin Islands on cropland that meets the established criteria.

Participants enter into a contract with CFSA in which they agree to take land out of production for 10 to 15 years or establish a permanent environmental easement, and install permanent cover, such as grass or trees. In return, USDA provides annual rental payments, one-time payments for half the cost of establishing cover, and technical assistance. Also authorized, but not offered in previous signups, are one-time lump-sum payments for environmental easement agreements.

The current enrollment of 36.4 million acres was reached in 1992 after completion of the twelfth signup. The OBRA-mandated target of 38 million acres by the end of calendar year 1995 has not been achieved to date because recent appropriations act language precludes enrollment of new acreage. However, two important announcements were made last year concerning actions the Department will take on

the future course of the CRP. The first indicated our intentions to offer CRP participants whose contracts were to expire in 1995 the option to extend them for a period of one year. The second press release, issued on December 14, 1994, announced that the Department would give farmers a one-time opportunity to withdraw from, reduce or extend their CRP contracts so that we can retarget the program to more environmentally sensitive areas and thereby expand the CRP's already significant environmental and conservation benefits. In the process of modifying contracts, the Department will also offer participants the opportunity to place conservation easements on high priority acreage to ensure that the most environmentally sensitive lands remain protected. Depending on the acreage released, a sign-up of up to 4.5 million acres is planned for late 1995 to replace a like number of acres that we estimate will drop out of the program through this "early out" option. In this way, there will be no net increase in acreage in the CRP in fiscal year 1995. The President's Budget also proposes to hold an additional sign-up in late calendar year 1995 under the same refocused environmental criteria in order to enroll an additional 1.6 million acres needed to reach the OBRA enrollment target. Since current CRP authority expires on December 31, 1995, this sign-up must be held during the first quarter of fiscal year 1996.

In 1995 we are making payments due on the previously enrolled acres—\$1.8 billion for rental payments and \$5.3 million for establishing vegetative cover. We also plan to make payments in fiscal year 1995 related to the newly enrolled replacement acres—about \$50 million for technical assistance. In fiscal year 1996, funding needs for rental payments will remain constant at \$1.8 billion; cover costs will increase by about \$92 million to reflect the new enrollments; lump-sum easement payments will be made for the first time, at an estimated \$5 million; and technical assistance costs will decline by \$30 million. The increase of \$183 million in the appropriation request for 1996 is needed to cover those costs that increase and to offset a lower unobligated balance expected to be brought forward at the beginning of the 1996 fiscal year.

Agricultural Conservation Program

The Agricultural Conservation Program shares with producers the cost of carrying out soil and water conservation and water quality measures on agricultural land. Nationwide in scope, the program is available to all farmers and ranchers who establish the need for cost-share assistance in solving a resource conservation problem. The program may pay up to 75 percent of the cost of eligible practices. Technical assistance is provided by the Natural Resources Conservation Service and the Forest Service. Funds appropriated to the ACP over the decade prior to 1995 have averaged about \$185 million annually.

The fiscal year 1995 appropriation of \$100 million has provided allocations to States of \$69 million for conservation practices under annual agreements, \$10 million for long-term agreements, \$15 million for Water Quality Incentive Projects of the type authorized under section 1439 of the FACT Act, and \$6 million for technical assistance.

The 1996 budget request of \$50 million, reflecting a 50 percent reduction from 1995, would permit funding for only the highest priority practices and would provide \$39.5 million for annual agreements, \$7.5 million for Water Quality Incentive Projects, and \$3 million for technical assistance. The program at this level will require even more rigorous priority setting to assure support for those crop management and pesticide reduction practices that address nationally recognized problems. It is assumed that States and others will continue their substantial assistance to farmers in financing most other conservation measures.

Emergency Conservation Program

The Emergency Conservation Program assists producers in rehabilitating farmland damaged by natural disaster and in carrying out emergency water conservation measures during periods of severe drought. The program shares the cost of practices to restore the land to its productive capacity as it existed prior to the disaster and does not address pre-existing conservation problems.

As might be expected, funding needs for this program vary widely from year to year, depending upon the occurrence of natural disasters. The \$3 million requested for 1996 would cover small-scale disasters and permit the agency to begin a prompt initial response to a more extensive occurrence.

Dairy Indemnity Program

The Dairy Indemnity Program compensates dairy farmers and manufacturers who, through no fault of their own, suffer income losses on milk or milk products removed from commercial markets due to residues of certain chemicals or other toxic substances. Payees are required to reimburse the Government if they recover

their losses through other sources such as litigation. Those program recoveries have, in fact, financed the program for several years, but these funds have now been largely depleted. The 1996 appropriation request of \$100 thousand would cover program needs in an average year with no major contamination incidents.

COMMODITY CREDIT CORPORATION

Domestic farm commodity price and income support programs are administered by the Consolidated Farm Service Agency and financed through the Commodity Credit Corporation, a government entity for which CFSA provides operating personnel. Funds are borrowed by the Corporation from the Treasury to finance CCC programs, and the Corporation has the authority to have outstanding Treasury borrowings of up to \$30 billion at any one time. Commodity support operations, handled primarily through loans, purchase, and payment programs, currently include those for wheat, corn, soybeans, minor oilseed crops, cotton (upland and extra long staple), rice, tobacco, milk and milk products, wool, mohair, barley, oats, sorghum, rye, honey, peanuts and sugar.

Commodity Program Outlays

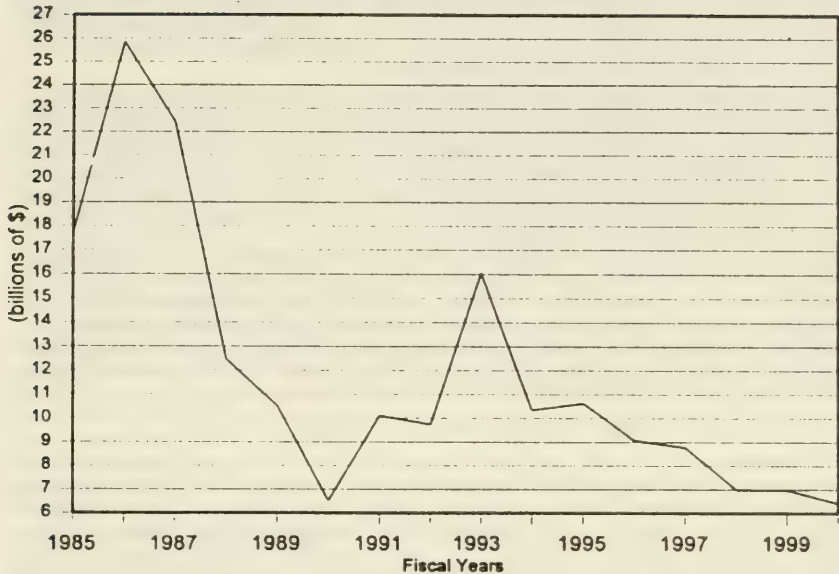
CCC outlays are highly variable and difficult to estimate. The variability reflects the intended role of CCC programs, which is to offset the negative effects of wide fluctuations in agricultural commodity markets on farm income and commodity prices brought on by unforeseeable changes in weather and foreign markets. The budget attempts to capture the impact of economic or other conditions 2 years into the future. The current 1996 budget estimates, for example, largely reflect supply and demand conditions for the 1995 crop, most of which has not yet been planted.

Mr. Chairman, the trend for Federal outlays for farm price and income support programs continues to decline from the fiscal year 1986 high of \$26 billion. CCC total net outlays in fiscal year 1994 were \$10.3 billion, \$5.7 billion lower than fiscal year 1993 outlays. Fiscal year 1995 outlays are projected to rise slightly, 2.8 percent, to \$10.6 billion. This increase is the net effect of higher outlays for corn, most of which will be offset by lower outlays for upland cotton and ad hoc crop disaster payments. For fiscal year 1996, total net outlays are expected to fall by \$1.6 billion—a 14.6 percent reduction—to \$9.1 billion, reflecting lower costs for the feed grain program as estimated yields in 1995 return to more normal levels following the record yields of 1994. The elimination of spending for ad hoc disaster assistance also contributes to the lower 1996 outlays as crop insurance reform is fully phased in with the 1995 crop.

In addition to savings resulting from implementation of the crop insurance legislation, the CCC budget reflects the continuing impacts of reduction in payment acres, phasing out of the wool and mohair program, increased marketing assessments, and other provisions of the Food, Agriculture, Conservation, and Trade Act of 1990 and the Omnibus Budget Reconciliation Acts of 1990 and 1993. The budget does not include 1995 Farm Bill proposals for the commodity price and income support programs. However, outlay reductions estimated at \$1.5 billion over the 1998–2000 period are contained in the budget; specific measures for achieving these savings will be proposed at a later date.

Budget estimates for the out-years reflect significant growth in demand for farm products, thanks to recent enactment of legislation implementing the North American Free Trade Agreement and the Uruguay Round of the General Agreement on Tariff and Trade, as well as implementation of regulations expanding the use of ethanol. Assuming a continuation of normal weather and yields, total net outlays are projected to continue to decline by the year 2000 to \$6.4 billion. One of the contributing factors to this reduction in CCC payments is the result of the Administration's December 1994 decision to extend Conservation Reserve Program contracts beyond their expiration dates. This declining outlay trend is shown on the graph below.

CCC - Trend in Outlays

*Reimbursement for Realized Losses*

The 1996 budget reflects an estimated need for \$10.4 billion to reimburse CCC for its prior years' realized losses, a reduction of \$5.1 billion from the fiscal year 1995 reimbursement of \$15.5 billion. In recent years, the appropriations to CCC have been gradually reducing the large balances of unreimbursed losses from previous years. The fiscal year 1996 appropriation will complete this process by fully restoring all cumulative unreimbursed realized losses through fiscal year 1995. At the same time, the unencumbered portion of the Corporation's \$30 billion borrowing authority at the end of 1996 is estimated to be the highest year-end balance ever, or \$20 billion.

FEDERAL CROP INSURANCE

Last October, Congress enacted the Federal Crop Insurance Reform Act of 1994, which is designed to strengthen the insurance program by giving the American farmer a much improved risk management tool, while replacing the ad hoc disaster payment program of the past. The Consolidated Farm Service Agency is implementing the primary features of this important legislation. Oversight of this function is through the Risk Management arm of the CFSA.

Crop insurance is a mechanism for farmers to protect the investment in their crops through the sharing of certain uncontrollable natural risks. An actuarially sound program which reflects sensible risk taking through effective program delivery and consistent loss adjustment procedures will be responsive to both the producer and the taxpayer.

Premiums are entirely subsidized for catastrophic insurance protection (CAT) for crop producers. CAT will compensate farmers for losses up to 50 percent of the producers' average yield at 60 percent of the market price selection. The cost to the producer for this type of coverage is an annual processing fee of \$50 per crop per county, up to \$200 per county. Additional (or "buy-up") coverage is available to the producer who wishes to insure crops above the 50 percent level. Producers can elect insurance coverage up to 100 percent of the market price established by FCIC for each unit of production that their actual yield is less than their yield guarantee.

The reform legislation also includes a Noninsured Assistance Program (NAP) for producers of crops for which there is currently no insurance available. NAP was established to ensure that most producers of crops not yet insurable will have protection against crop catastrophes comparable to protection previously provided by ad hoc disaster assistance programs.

The budget for the Federal Crop Insurance Corporation Fund reflects the mandatory spending for the program. This includes indemnity payments over and above the premiums paid by producers, certain loss adjustment expenses, and the cost of reimbursing private insurance companies for delivering the program. The fiscal year estimates of spending are based on activities covering both the current and the prior crop year. For example, the estimate of budget authority needed for fiscal year 1996 reflects both 1995 and 1996 crop year activities.

The fiscal year 1996 estimate of budget authority for mandatory spending is \$1.264 billion, which represents an increase of \$157 million over the current estimate for 1995. This increase is due to increased participation. About 2.5 million more acres are expected to be insured, and about 10 percent of the farmers who received only CAT coverage on their 1995 crop are expected to move up to higher levels of coverage on their 1996 crop. This increase in participation requires an increase in premium subsidy of about \$93 million, and an increase of about \$49 million in reimbursement to private insurance companies.

These estimates reflect a 1.1 loss ratio, which is required by the new legislation. Further, reimbursements to private insurance companies are based on a rate of 31 percent of premium, the same as in fiscal year 1995. Also, it is important to recognize that we are requesting appropriation language of "such sums as necessary" for mandatory spending. Such language was part of the 1995 appropriation, and makes it possible to keep the program open in the event the participation exceeds anticipated levels, or other unforeseen circumstances occur.

AGRICULTURAL CREDIT INSURANCE FUND

Farm Programs

Supervised direct farm lending programs assist producers, including beginning farmers and members of socially disadvantaged groups, who are left out of private credit markets because they are considered to be too great a risk. Farm credit extended by the Consolidated Farm Service Agency gives farm families a chance to get started, stay in business, or expand their operations. By helping to keep families on the farm, we are also helping these families to sustain the economy of their local communities. Borrowers are expected to show the ability to repay and to have the management skill required to successfully operate a farm. These requirements help keep the cost of the program within reason and minimize delinquencies. The goal of the program is that through supervised credit and improved servicing, CFSA borrowers will eventually move to private credit. The fiscal year 1996 budget for the farm credit programs within the Agricultural Credit Insurance Fund proposes to maintain credit assistance at current program levels, or about \$3.2 billion. This requires a subsidy appropriation of \$187.8 million, an increase of \$26 million from fiscal year 1995, due largely to increases in interest rates. I will briefly discuss the major program components.

Farm Ownership Loans

Direct farm ownership lending will be targeted to beginning farmers and financially needy applicants. For direct farm ownership loans we are requesting an appropriation of \$16.4 million, the subsidy cost of a loan level of \$70 million. For guaranteed loans in fiscal year 1996, we are requesting an appropriation of \$19.7 million, which will support a loan level of \$541 million. Guaranteed farm ownership loans are most cost-efficient for the taxpayer because of their low subsidy cost. In addition, the shift of some loan making responsibilities to private lenders allows CFSA's farm credit staff to spend more time providing supervised credit assistance to direct loan borrowers.

Farm Operating Loans

The agency plans to use outreach, borrower training, supervised credit and improved automation to help make the Direct Farm Operating Loan Program more successful. We are requesting an appropriation of \$74.2 million, which will make it possible for us to provide \$543 million in direct farm operating loans. A subsidy appropriation of \$18 million will allow us to make \$200 million in subsidized guaranteed loans. Our largest farm operating loan program is unsubsidized guarantees. A request for \$18.4 million in appropriated funds will cover the Federal cost of \$1.7 billion in loans.

We are requesting \$32.1 million for emergency disaster loans, which will provide a loan level of \$100 million, adequate for anticipated emergency needs.

Grants

For State Mediation Grants, a program that has been demonstrated to be effective in managing farm credit and protecting taxpayers' interests, we are requesting an

appropriation of \$3 million. We are also requesting \$3 million for Outreach Grants for Socially Disadvantaged Farmers, a program authorized by the 1990 FACT Act that uses land grant colleges to provide the technical assistance required by some of our neediest borrowers.

ADMINISTRATIVE SUPPORT

Expenses for administering all of the programs that I have been discussing are proposed to be funded by a consolidated Salaries and Expenses account. The account is comprised of a direct appropriation, transfers from program loan accounts under credit reform procedures, user fees, and advances and reimbursements from various sources. These reimbursements include funding from the Foreign Agricultural Service (FAS) for administrative support activities provided to FAS as a result of USDA streamlining efforts. Under reorganization approximately 182 staff years of administrative personnel were transferred to CFSA. By consolidating administrative services, we hope to achieve greater efficiencies and redirect staff from administrative areas to program delivery areas.

Other reorganization activities which are associated with streamlining our county office structure are underway. Acting CFSA State Executive Directors have submitted implementation plans for restructuring the field offices under their jurisdictions. These plans are being reviewed to assure that the structures implemented promote effective delivery of programs and services at one-stop USDA Service Centers. Offices which can easily be closed or moved to collocated USDA facilities with little cost or personnel impact are being implemented first. We anticipate implementing approximately 30–40 percent of these changes in fiscal year 1995. The more difficult adjustments, which require more costly moves and relocations for another 40 percent of the anticipated closings or moves, are anticipated for fiscal year 1996.

The requested 1996 direct appropriation for CFSA Salaries and Expenses is \$811.8 million. Together with transfers for administrative expenses from the Agricultural Credit Insurance Fund program account, the Public Law 480 program account, and the CCC Export Guarantee program account under established credit reform procedures, this will provide a total appropriation level of \$1.027 billion, an increase of \$46.9 million over the costs of the comparable activities in 1995. The major components of the increase are support of Federal Crop Insurance reform, and pay costs.

In 1996, activities related to crop insurance are expected to be approximately double the level they were prior to reform. An increase of approximately \$20.1 million is needed to respond to this expansion in order to cover such items as CFSA county office delivery expenses not covered by the catastrophic risk insurance service fee, such as those associated with the Non-Insured Crops Assistance Program (NAP); support services provided to reinsured companies in the selling and servicing of catastrophic and buy-up policies; enhancement of automated systems in support of reform; and training and other costs.

An increase of \$15.8 million is needed for the annualization of the 1995 pay costs and the proposed 1996 Federal pay raise of 2.2 percent. The increases requested for 1996 are partially offset by decreases in funding for discretionary expenses such as contractual services, travel, printing, and other operating expenses, in line with the Secretary's streamlining efforts and the effort to reduce overhead costs. Because the use of buy-out authority in 1995 achieved significant staff year reductions toward streamlining targets, both Federal and non-federal county staff years are virtually unchanged in the fiscal year 1996 Budget.

I would like to close by emphasizing our support for the Department's budget request for InfoShare activities. We in CFSA are full members of the InfoShare partnership that is comprised of the USDA farm services, rural development, and natural resource agencies. Through this partnership, we continue to coordinate our business processes reengineering, organizational change management, and information technology acquisitions with other USDA agencies. It is through this partnership that we are providing a Department-level vision and strategy when modernizing and delivering USDA programs to the public.

Mr. Chairman, this concludes my prepared statement. I and my colleagues will be happy to answer your questions and those of the other Subcommittee Members.

BIOGRAPHICAL SKETCH

LOU ANNE KLING

Lou Anne Kling, a fourth generation Minnesota farmer, is the Acting Deputy Administrator for Farm Credit Programs of the Consolidated Farm Service Agency (CFSA) at the U.S. Department of Agriculture.

Before being named to this position, Ms. Kling served as an Assistant Administrator of the Farmers Home Administration (FmHA) where she was responsible for making and servicing farm operating, ownership and emergency loans for FmHA's 135,000 direct farm borrowers with a loan portfolio of \$13 billion. She also will oversee a guaranteed farm loan portfolio of \$5 billion held by almost 42,000 farmers.

Ms. Kling, whose grandfather and great-grandfather were homesteaders, was a family farm advocate before being appointed FmHA State director for Minnesota in April 1993. She was appointed assistant administrator in FmHA's Washington, DC, office in December 1993.

Ms. Kling was born in Granite Falls, Minnesota, where she and her husband, Wayne, own a farm producing hogs, corn, soybeans and wheat. One of their seven children is now operating the farm. As the farm economy deteriorated in the early 1980's, she became a counselor to farmers having financial difficulties. This advocacy work led to the creation of the Neighbors United Resource Center, which also assisted with negotiations, mediation and appeals. This in turn led to the establishment in 1984 of the Minnesota Department of Agriculture's Farm Advocate Program with Ms. Kling as its director.

Her work helped pave the way for the creation by Congress of a USDA-certified mediation system in which 18 States now participate. She co-authored the book, "Farmers' Guide to FmHA," which sold 55,000 copies and produced a documentary on mediation and another on the experience of five farm families during the 1980's.

In recognition of her advocacy work for family farmers, Ms. Kling was presented the Minnesota McKnight Human Services Award, the Minnesota University Women's Leadership Award, and the Minnesota Farm Futures Leadership Award.

BUDGET IMPLICATIONS OF REORGANIZATION

Senator COCHRAN. I appreciate very much the complexity of it all and the many levels at which you have to pay close attention to be sure, first of all, you continue to provide those services to farmers and others, and, at the same time, try to keep the commitment to save money and streamline and make more efficient the operations of the Department and the agencies.

It seems to me, for example, that we may end up having the same or similar experience with the Base Closure Commission effort. You know, the projections of how much money the Department of Defense is going to save by closing a lot of Armed Forces bases and installations and consolidating others has come down considerably. When reality sets in, you find out that those cost savings can't be realized or there are expenses attendant to closing and consolidating which people didn't fully appreciate when the plans were first made.

I wonder if the early read on the budget implications would be similar to that. Are you going to be able to achieve the savings in the expenses and costs of operating the Department as early as anticipated and forecast, or are you going to end up spending more money doing this than you earlier expected?

Mr. MOOS. Mr. Chairman, we are still very optimistic that we can realize those kinds of early savings. But there are, as you indicate, a whole host of complications and problems that we will have to deal with.

We've got to be able to continue to provide service. And that in itself may cause some complications in terms of achieving exactly the amount of savings that had been earlier forecast.

Senator COCHRAN. I notice in the administration's budget that there is an additional \$8.9 million requested for the next year to implement the reorganization.

In the 1995 budget justification, there was a request for \$5.9 million in increased rent and utility expenses that were anticipated as a result of the early effort to begin the reorganization.

My question in that connection is: Has the Department used any of the \$5.9 million that was provided for this fiscal year for increased rent costs to close or consolidate offices?

Mr. MOOS. I'm going to call on Grant to respond to that. But I must say that we are scrambling, moving money back and forth, trying to fill all of the holes that are developing. And we are doing our best in that sense.

But, Grant, can you respond?

Mr. BUNTROCK. Yes, Mr. Chairman. Yes; we will have spent the \$5 million included in the 1995 budget for this purpose, and probably a little bit more that we will be absorbing as we move forward with the merging.

In general, what we are finding is that, without question, some of the savings I know that we talked about in the passage of the legislation, as well as the implementation stages, are very real. We will get those savings. The major question is the timing. There are, as you certainly are aware, some front-end costs associated with this type of massive reorganization; not only in the area of just the housekeeping or the nuts and bolts of movement from one office to another, but also movement of the associated equipment, automation equipment, telecommunication lines that are necessary to be installed as part of our InfoShare efforts, and assorted other activities that all come into play when you make this kind of movement and merger.

So the simple answer to the question of these funds is yes, we will be using the \$5 million that was earmarked in 1995, as well as this amount for 1996. And we will probably have to absorb some additional costs in this budget that we have put forward in addition to those amounts we have earmarked.

BUDGET SAVINGS FROM COUNTY OFFICE CONSOLIDATION

Senator COCHRAN. My other question in this connection is: Does the fiscal year 1996 budget reflect savings from field offices that have already been closed or consolidated? If so, where are these savings reflected?

Mr. BUNTROCK. Let me try to answer the question this way: Our major savings will have occurred throughout this process in personnel resources. As you are aware, we have used a combination of attrition and buy-out authority, moving into this reorganization and merging these offices.

We are currently in the process of using a buy-out authority that is available to the Department with the option to delay effective dates until 1996 and 1997. We have opted to use it particularly in the support or administrative area, in the CFSA as well as the RECD, which will become a part of the USDA service centers.

Even there, at the time that you use the buy-out authority, you have front-end costs. We make that up, of course, very quickly with the reduction in salaries, particularly in those cases where we have

earmarked or targeted midlevel positions, management positions, grades 13 through 15, for example.

That will be one of the major sources of savings. We have calculated, up to this point in the process, a savings of approximately \$45 million through the use of buy-outs and attrition.

Mr. MOOS. Mr. Chairman, I think it is fair to say that most of the early savings have to come from the closing or the colocation of the county offices, which shows how critical it is to be able to move quickly in that regard.

Senator COCHRAN. Well, shouldn't we be saving rental costs, if we are closing offices, rather than seeing rental costs go up?

Mr. BUNTROCK. Mr. Chairman, that is right. We are going to have fewer offices when we are all finished. Absolutely, there will be some savings in rent. I don't have that number right with me, but there will be savings.

When I refer to front-end costs, they primarily fall into two categories. One of them is just the actual moving of personnel and the associated costs for that movement, to get them in place. The other one is some front-end cost in obtaining that space. Overall, the total space that we will be occupying will be less after the merging is done. There will be some savings, and we can certainly get the numbers.

Senator COCHRAN. With the reduced allocations that we are anticipating under the budget resolution—and we don't know what those are going to be—but we anticipate we will have less discretionary funding than we had last year. We may be hard pressed to provide the additional funds that are being requested for this reorganization effort.

I am looking throughout our accounts for places where we can achieve some savings without disrupting services or causing unnecessary problems for farmers.

I wonder whether or not these additional costs can be absorbed or whether there will be special problems encountered if these additional funds are not made available? I am specifically referring to the \$8.9 million you request to implement the reorganization in this next fiscal year.

Mr. BUNTROCK. Mr. Chairman, without a question, this would certainly have a direct impact on the progress and the timing of some of these mergers.

Senator COCHRAN. It could stop the reorganization effort in its tracks is what you are saying.

Mr. BUNTROCK. Yes; it could certainly slow it down dramatically.

Senator COCHRAN. Or slow it down anyway.

Mr. BUNTROCK. That is correct.

CROP INSURANCE FOR CALIFORNIA FLOOD DAMAGE

Senator COCHRAN. This morning's radio news had a story and an account about the implication of the California floods. When you were talking about crop insurance, I happened to remember what they were saying.

The entire crops, apparently, of some produce commodities are considered total losses. This is going to cause shortages, price increases, notwithstanding the impact on growers in that region.

I wonder whether you have any early indication as to whether crop insurance under the new reforms will be able to provide benefits that will help those growers and others deal with the impact of these floods and that disaster.

Mr. MOOS. I am going to turn to our Acting Deputy Administrator for Risk Management for more information in that regard. But it is a little too early yet to really judge just how much damage has occurred out there in California as a consequence of the latest rainstorms.

I notice in the morning's news that the California Department of Agriculture is now estimating that there could be as much as \$300 million of agricultural losses, which would be three times the losses that were expected from the earlier storm that occurred out there in California.

But let me please turn to Mr. Ackerman.

Mr. ACKERMAN. Mr. Chairman, as you note, the situation in California will be a key early test of the new crop insurance reforms.

As Mr. Moos said, we don't have firm numbers on the magnitude of the losses. But we understand that most of the crops that were damaged were generally uninsured crops—strawberries, lettuce, broccoli, cauliflower, artichokes, and others.

These will be covered under the new reform program under the so-called NAP portion of it, which is a Noninsured Assistance Program, under standing law for crops that are not covered by crop insurance. The NAP regulations are undergoing their final signoff within the Department and will be public shortly.

The major difference between the NAP and prior disaster assistance is that California growers will not need to come to Washington for special disaster relief legislation for their situation. The program is standing law. It has an area trigger.

For insurable crops that are affected, primarily grapes and almonds, the signup period closed a couple of weeks ago, and I understand that generally purchases of crop insurance have been quite heavy. So we think that coverage will be very good.

Senator COCHRAN. That is good news. I may have some questions on this subject later on. But at this point, I am going to recognize my distinguished colleague from the State of Washington, Senator Gorton, for any comments or questions that he might have.

PROMOTION OF U.S. AGRICULTURAL EXPORTS

Senator GORTON. Mr. Chairman, thank you very much.

I have a number of questions here, mostly for Mr. Schumacher, which I will submit to the record.

But while we are here and doing it orally, I would like to ask for a couple of comments on his part with respect to the various programs that promote American agricultural exports and the intensive criticism to which they are being subjected at the present time.

In the course of the last week, we have seen at least a couple of local newspaper articles about the Market Promotion Program as corporate welfare for McDonald's, Campbell Soup Co., and the like. I know you are familiar with these criticisms.

What does the administration—what is your office doing to, at least, counter this criticism, to explain the connection between

these relatively modest programs and 40 billion dollars' worth of sales and all of the jobs that are dependent upon agricultural exports.

Mr. SCHUMACHER. Senator, thank you very much.

Mr. Moos said earlier that one of the issues that we have addressed very aggressively here is our competitiveness. I have been here about 9 months and have become very aware of the competitive practices of our friends in Europe, Canada, and our friends in Australia and in other places.

A post-GATT world is going to be very, very competitive. This year, U.S. agricultural exports will total \$48.5 billion. But if you add fish and wood products, which are very important, of course, in your State, we are coming up toward \$60 billion in exports overseas.

Because of the tools that we have—and those include the MPP and the Cooperator Program, plus the programs run by my colleague, Chris Goldthwait, on GSM-102—these have been absolutely essential to achieving these record exports, in light of our competition overseas.

In fact, on value added, which is particularly important in the Northwest, we have gained market share. The Europeans are now basically budgeting about \$10 billion in export subsidies. That will drop down to about \$6 billion under the GATT agreement, which is a substantial drop.

We are going to monitor very, very carefully what they do with the extra \$4 billion they will be saving. I suspect they will be spending it to compete with the products on the value added side, where we are beginning to gain market share from 10 to 15 percent.

That is why I feel that it is very critical that our work on the Market Promotion Program and the Cooperator Program continues, because I think the key objective of the MPP and our Cooperator Program is to sustain that increase, and particularly income, and particularly jobs. For every \$1 billion in exports, we could have another 18,000 jobs.

I think it is also very important—and I have been trying to visit a lot of the States to explain this and talk to our friends in the media—that the MPP is a public/private cooperative partnership. That is very important.

We don't directly provide funds to the companies under the cooperatives and to the farmers that participate. We work through nearly 100 nonprofit organizations to work promoting these exports overseas.

I think it has worked very well. The Cooperator Program, or FMD, has been in existence for 40 years. It has had great success on the bulk side. The MPP has had great success on the value added side.

CHANGES TO THE MPP

But during the 9 months I have been here we have had to look at some changes. It has been criticized. And since I have been administrator, Mr. Moos and I have worked quite aggressively on making a number of changes, which I think address some of these issues that really stem from 3, 4, sometimes 5 years ago.

For example, we will be focusing much more on the medium and small firms, as mandated in legislation authority. We plan to graduate the larger firms and corporations who provide a single brand in a different country over 5 years.

In fact, when we looked at the record, we found only 5 to 6 percent of the whole MPP is going to some of the larger firms. There are only 10 to 12 firms. Those graduated over the next few years, out of the program in the single brand operation.

We have new regulations to make it less bureaucratic. A lot of counties in your State—and you are a major beneficiary, of course——

Senator GORTON. Mr. Schumacher, I am afraid that at this point I am going to have to cut you off. It looks that we have begun a vote on the floor of the Senate.

PREPARED STATEMENT

I will have some other questions for you. We have your complete statement and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF AUGUST SCHUMACHER, JR.

Mr. Chairman, members of the Subcommittee, I appreciate the opportunity to meet with you to discuss the work of the Foreign Agricultural Service (FAS) and to present the President's budget request for fiscal year 1996.

1994—A YEAR OF ACCOMPLISHMENT

For FAS, 1994 was truly an extraordinary year—a year capped by the passage of the implementing legislation for the Uruguay Round Agreement under the General Agreement on Tariffs and Trade (GATT). The agreement represents the culmination of more than eight years of hard work, particularly in the agricultural area where some of the most contentious issues of the entire round were negotiated. The GATT agreement will strengthen the world economy, and help to give American farmers, ranchers, processors, and exporters a more level playing field to compete for trade opportunities in the global marketplace.

Along with the GATT agreement, 1994 marked the year that the North American Free Trade Agreement (NAFTA) was implemented. NAFTA is the beginning of an historic new trading relationship here in our own hemisphere. It created the world's largest market of some 370 million people and \$6.5 trillion in annual output. U.S. producers are seeing immediate benefits from the agreement. In the first year of implementation, U.S. exports of agricultural, fish and forest products to Mexico rose 21 percent to \$4.9 billion. New export records were set for rice, soybeans, cotton, peanuts, feeds and fodders, animal fats, red meats, poultry, fresh and processed fruits and vegetables, wine and beer, nursery products and cut flowers, pet foods, logs and canned salmon. And, although the recent decline of the peso may cause a short-term decline in U.S. exports, longer-term export prospects still look good.

Together, these two agreements provide a foundation for continued trade liberalization, the broadening of fair trade rules, and the expansion of global markets. The successful negotiation and implementation of these agreements was imperative, because U.S. farm and food production already far exceeds the needs of our own market and domestic demand growth is expected to be modest for the next decade. The growth markets of the future are outside our borders where more than 95 percent of the world's 5.7 billion consumers live.

If you look at the chart comparing the growth of U.S. consumer food exports to domestic retail food sales since 1985, you can see why we in FAS see the export market as the future for U.S. agriculture.

A Healthy U.S. Food and Ag Industry Export Markets Are the Answer



In the eight years since 1985, the growth in U.S. consumer food exports has more than tripled, while domestic sales have grown at a far more modest rate. Clearly, the export market is the key to a healthy U.S. food and agricultural industry now and in the future.

Total exports of agricultural, fish and forest products reached a record \$53.3 billion in fiscal 1994; agricultural exports alone closed the year at \$43.5 billion. Agriculture was one of only four out of 11 U.S. major industrial groupings to log a positive trade balance in 1993, the last year for which these sectoral data are complete.

New export records were registered in 1994 for red meat, poultry, fresh fruit, processed fruit and vegetables, nuts, wine and beer, pet foods, panel products, and vegetable oils (excluding soybean oil). In 1994, rice exports rose 16 percent, helped by first-time ever sales to Japan. Exports of soybean oil rose 32 percent, exports of poultry meat rose 39 percent, cotton was up 50 percent, and horticultural products were up 11 percent.

MISSION AND GOALS OF THE AGENCY

These numbers that I have just cited represent a special challenge for FAS. Last year, USDA set an export goal—a 50-percent increase in the value of exports by the year 2000. That means FAS must work closely in concert with the private sector to increase exports of farm products from \$43.5 billion last year to \$65 billion by the end of the decade. That's an ambitious goal, but a realistic goal. We need to set our course for expanded exports, but we need to be careful to strive for sustainable trade growth. We don't want to repeat what we saw in the 1970's with its tremendous export boom—only to be followed by shrinking U.S. export sales and market share by the mid-1980's.

We are beginning to see evidence that the current export trends may be sustainable. The Department's latest forecast for fiscal 1995 projects a record-high \$48.5 billion in exports of U.S. agricultural products, up \$5 billion from \$43.5 billion last year. In the first three months of fiscal 1995, U.S. agricultural exports overall were up nearly 19 percent, with bulk commodities up nearly 19 percent, semi-processed products up 16 percent, and our consumer food exports up nearly 20 percent. Exports were running ahead of year-earlier levels in nine of our top ten markets.

We need to work to achieve a vibrant export sector, because exports are crucial not only to the health of U.S. agriculture, but to the health of the entire U.S. economy. Last year, our agricultural exports supported more than three-quarters of a million jobs both on farms and in our cities and generated an additional \$60 billion in support services to harvest, process, package, store, transport, and market the products. That adds up to over \$100 billion of U.S. economic activity related to farm exports.

When we reach our goal of \$65 billion, those numbers will be even more dramatic. According to Department economists, that \$65 billion in exports will support nearly 1.2 million jobs and generate nearly \$90 billion in support services. That adds up to \$155 billion of U.S. economic activity related to farm exports.

These figures not only illustrate the importance of agricultural trade to our entire economy, they also paint a clear picture of why export market development is an investment in our country's future. We know the demand for agricultural products is there. The question is which of the major exporting nations will get the business? With worldwide competition heating up, there has never been a more critical need for the United States to strongly support creative export market development programs—programs designed to help keep American agricultural, seafood and wood products competitive in world markets.

That is why FAS will continue to:

- identify constraints to U.S. exports and implement strategies for overcoming these constraints;
- aggressively pursue reductions of trade barriers and trade-distorting practices on the part of key trading partners;
- ensure that U.S. farmers and our research community have information about areas of emerging foreign demand;
- defend U.S. agricultural interests by keeping U.S. policy views before the international community;
- strengthen the export knowledge and skills of producers, processors and exporters so they can compete more effectively in the international marketplace;
- educate foreign buyers on the merits of U.S. products and how they can be purchased; and
- support economic development efforts, especially in emerging markets and developing countries.

These activities will allow us to maintain the steady growth we've seen over the past few years. But if we are to achieve our goal of a 50-percent increase in exports by the year 2000 and support over 1 million jobs, we will need to invest in new export sales opportunities and establish an aggressive presence in foreign markets where the competition is already busy at work. To do this, we will need to:

- ensure market access in accordance with GATT and NAFTA accomplishments;
- expand our overseas marketing and information base;
- improve export promotion and trade services; and
- improve our commercial credit tools and other export assistance programs.

It is only through these aggressive, pro-active measures that we will succeed in meeting the competitive challenges facing us now and in the future.

CHALLENGES AHEAD

We know that we will need to be vigilant during the implementation phase of the Uruguay Round Agreement. We must ensure that all countries fully implement their commitments and must be ready to challenge them if they fail to do so.

With better trade access and fewer restrictions, the competition will inevitably intensify. Our competitors are not standing still. Already, in terms of market development funding, 11 of our major agricultural trade competitors are spending a total of about \$500 million annually to carry out a wide variety of programs, almost four times the amount that USDA will spend on market development programs this fiscal year.

For example, significant producer-funded promotions in several European Union (EU) countries are possible largely because of the artificially high producer prices guaranteed under the EU's Common Agricultural Policy. Australia, New Zealand and Canada, on the other hand, rely heavily on marketing boards—usually government monopolies—to compete in world markets and to carry out market development efforts.

Our credit guarantee programs also face competition from such organizations as France's COFACE export credit agency, and our competitors have trade offices in key markets throughout the world and are opening more. Australia, for example, has expanded its agricultural trade offices in Pacific Rim countries from 18 to 30.

Then, there are the continuing trade policy challenges. Expanding the NAFTA to include Chile is high on the Administration's agenda. Bringing a major trading partner like China into the new World Trade Organization poses a different set of challenges. And, of course, we will always face the challenges of bilateral disputes, such as our disagreements with Canada, Korea, the EU and China.

There are also the unforeseen challenges: the devastating earthquake in Japan and the decline in the value of the Mexican peso, for example. These two events illustrate our need to create opportunities for broad-based, sustainable export growth so that we are not overly dependent on a handful of markets or commodities.

We also face the challenge of expanding our outreach efforts. If we are serious about the role that exports must play in the health of the U.S. agricultural, fish

and forest products industries, then we must work harder to assist current and potential exporters.

In my first eight months on the job, I have been impressed by the level of interest in the export market that I have seen from Iowa to Vermont to Georgia, from West Virginia to Washington.

My first trips as FAS administrator were to the Midwest. In Iowa, I met with agricultural food exporters, including Iowa grain shippers and a Mexican grain importing team. I toured the plants of some of our program participants in Minnesota and Illinois and discussed the export objectives of commodity groups such as the International Apple Institute and State regional trade groups such as the Mid-America International Agri-Trade Council.

On another trip, I met with exporters in Vermont. Now you may not think of Vermont as a major agricultural export state, but while I was there I met with exporters of dairy cattle, dairy genetics and dairy products like ice cream. I met with exporters of wood products and meat; exporters of organic produce and ciders; exporters of cheese cake, maple syrup and wool. I was impressed by the depth of knowledge and the interest in the export market that I saw there.

In January, I participated in a marketing and export conference in North Dakota that was attended by more than 5,000 people—nearly one percent of the state's population. There I got a chance to meet with farm organizations, commodity groups, cooperatives, State officials, farmers and food processors to hear from them and let them know about the programs of FAS and the services we have available to assist them. I was particularly impressed with the interest of many co-ops, farmers and industry in FAS programs and the export market.

On another trip to West Virginia, I met with poultry processors and wood products companies whose businesses are dependent on the export market. I was very impressed by what I learned. One firm acquires its materials from over 80 saw mills, creating hundreds of jobs in the region, and exports about 90 percent of its lumber. Clearly, they are a strong advocate for continued export market development and a perfect example of how the economic benefits of exports reach deep into local communities.

CURRENT ACTIVITIES AND ACCOMPLISHMENTS

These challenges that I just described illustrate why I believe FAS must play an even more prominent role in export expansion. Whether it's working to resolve trade disputes, helping exporters meet contracts in the face of natural disasters, supporting the American private sector as it battles in export markets against foreign competitors flush with funds from their national treasuries, or educating potential exporters, FAS has a vital role to play. Over the 40-year history of FAS, the agency, in conjunction with Congress, has developed the tools to help the U.S. private sector expand exports of American agricultural products. These programs touch virtually every corner of the globe to serve both the immediate and longer term interests of U.S. agriculture.

The 1985 and 1990 Farm Bills provided a wide range of export promotion programs to accommodate all stages of a customer country's development—food aid and other concessional programs for developing countries, export credit guarantee programs for more advanced developing and middle-income countries that depend on credit, and export assistance and market development programs to promote commercial sales to regain, maintain, or increase the U.S. market share in both developed and developing country markets. To keep pace with the dynamic world marketplace, we use these programs alone or in combination as necessary to maximize sales opportunities for U.S. agricultural producers.

Of course, the changing world trading environment brought about by the NAFTA and Uruguay Round Agreement will influence the course of the 1995 Farm Bill debate. And USDA will continue to review its export promotion and market development programs to ensure they remain effective for meeting our export expansion goals in a more liberalized trading environment.

Let me now describe how we use these tools to meet the unique demands of developed, middle-income and developing markets.

BUILDING SALES IN DEVELOPED MARKETS

Developed countries are those that have steady economic growth, high per capita gross national product, and above average standards of living. In markets such as these, our program goals include improving market access through trade policy negotiations, maintaining competitiveness for our products, and building markets for new products. We work to accomplish these goals in a variety of ways—but particu-

larly through our trade negotiating efforts and through activities such as the Market Promotion and Foreign Market Development Programs.

In addition to the trade policy accomplishments of the Uruguay Round Agreement and the NAFTA that I mentioned previously, FAS staff also works aggressively and continuously on a number of bilateral negotiations. I will highlight some of the more notable achievements of the past year:

- After more than a year of continuous negotiations, the United States and Canada signed a Memorandum of Understanding concerning trade in wheat. This agreement addressed the immediate problem of a surge in imports of Canadian wheat, while also creating a process for resolving long-term problems by establishing a Joint Commission on Grains to examine all aspects of the two countries' respective grain marketing and support systems and the effects of those systems on domestic and international markets.
- Following years of denying imports, Japan continues to purchase U.S. rice. In 1994, Japan purchased 537,000 tons of U.S. rice. In addition, after nearly 20 years of negotiation, Japan finally agreed to permit the import of American apples.

Despite these advances in bilateral activities, a number of contentious issues remain. For example, we continue to work to resolve issues with Canada on a number of products such as poultry, eggs, dairy products and sugar. The European Union's hormone ban is estimated to have cost U.S. producers about \$100 million a year. We are hopeful that the new trade disciplines under the World Trade Organization will lead to an eventual re-opening of that market.

Our trade policy accomplishments and concerns extend beyond developed countries. On the positive side, China agreed to a procedure that permitted U.S. apple imports from the State of Washington. In addition, China cut tariffs on a number of key agricultural products of interest to the United States by an average of 50 percent. Products included fresh fruit, dried fruit and nuts, and vegetable oils. However, China still does not comply with the Section 301 Memorandum of Understanding on using scientifically based sanitary and phytosanitary standards for plant and animal imports. In addition, we are working to resolve a number of issues with Korea, including shelf-life requirements that hinder U.S. red meat exports to that country and Korean port clearance procedures, testing and retesting requirements, and other barriers that prevent imports.

Market Development Programs

Our trade policy efforts focus on achieving and maintaining market access for our products. Once that access is achieved, our export assistance activities, the MPP and the Foreign Market Development Cooperator program, FAS trade shows and product promotion activities, are designed to maintain and increase sales and to introduce new U.S. product lines into developed markets and solidify that demand. The MPP, for example, which is a cost-share partnership, has been invaluable in helping boost sales of high-value food products, which have become the United States' strongest agricultural export performers in the past decade. Increasingly, MPP is being used in all types of markets to help U.S. exporters take advantage of the world's seemingly insatiable appetite for high-value food products.

The Market Development Cooperator Program also is a partnership between U.S. farmer organizations and USDA that allows us to combine forces and pool our technical and financial resources to initiate and carry out a variety of foreign market development projects. Federal support focuses on participant expansion into areas of the world where the greatest market development potential exists. Both the MPP and the Cooperator program are operated on a cost-share basis with the U.S. export community.

During fiscal 1994, \$100 million was allocated to 56 participants to promote agricultural products under MPP. For fiscal year 1995, we will be making \$85.5 million available although the President's budget does propose to increase that level to \$110 million. Applications for the fiscal 1995 MPP were due March 3. We are now reviewing those applications and will announce the allocations in the near future.

Mr. Chairman, this program, perhaps more than any other administered by FAS, has been criticized. Let me assure the Committee that FAS has listened to the suggestions and has made—and continues to make—great improvement. In February, we announced new regulations that broaden the program to give priority assistance to small businesses; reduce paperwork requirements; clarify and simplify terms; explain the application process in step-by-step detail; and add procedures for appealing compliance findings. In addition, in accordance with provisions of the Uruguay Round implementing legislation the requirement was deleted that organizations and companies need to show that a U.S. agricultural product faces unfair trade practices in an overseas market in order to participate in the program.

These new regulations establish performance measurements for the program and impose new standards aimed at limiting program participation to those commodities and markets that offer the most promising growth potential for firms that, without Federal assistance, would be unable or unwilling to enter the export market. The new regulations also broaden the MPP and make it easier for participants to use and understand. These changes are an example of this Administration's commitment to streamlining government programs and to helping U.S. exporters break into and hold onto export markets.

In addition to the new regulation, FAS recently released a study titled "Evaluating the Effectiveness of the Market Promotion Program on U.S. High-Value Exports." The study was undertaken last year to determine the program's cost effectiveness as a Federal investment. Using a number of program effectiveness and efficiency measures, a clear picture of MPP and its predecessor, the Targeted Export Assistance (TEA) program, begins to emerge. While the programs' benefits were initially limited, our study concludes that the 25-fold increase in export promotion activities for U.S. high value food exports made possible by the two programs strongly supported the 300-percent increase in exports of those products since 1986 and was the leading factor in increasing the U.S. share of the world consumer food market. The lower value of the dollar since 1985 was a close second as a contributing factor.

In 1992, the cumulative effect of TEA and MPP was estimated to have increased consumer food exports by \$3.4 billion over the level they would otherwise have been. By 2000, assuming the program is maintained at \$110 million a year, MPP is projected to increase U.S. exports by as much as \$5.6 billion.

The success of TEA and MPP in boosting high-value exports supported almost 75,000 nationwide jobs and \$9 billion in direct and supporting economic activity in 1992. Two-thirds of those jobs were off the farm, principally in manufacturing, transportation, and service industries. The other third, totalling 26,000 jobs, were on the farm. All regions of the country have benefited from MPP's employment and economic effects, led by the midwest and southern states, but with California receiving more benefits than any other state. Assuming the program remains funded at \$110 million during 1995-2000, its effectiveness will expand through the end of the decade. By the year 2000, the export expansion resulting from TEA and MPP is expected to support 124,000 U.S. jobs and total economic activity valued at \$15 billion.

Let me also share with you some additional evidence of the program's effectiveness.

Last year, a new regulation by the Japanese government requiring that poultry products be identified by country of origin actually helped sales of U.S. poultry, thanks to a "sticker" campaign conducted by the USA Poultry and Egg Export Council under the MPP. The Council spent \$167,000 in MPP funds to conduct joint promotions with 12 chain stores in Japan. The stores affixed the U.S. stickers to product packaging, displayed point-of purchase materials and devoted a greater portion of shelf space to U.S. poultry products. By the end of the promotion, the 12 chains reported total sales of over 110 tons. A year after the program, the stores continue to use the U.S. labels.

To counteract price pressure from other countries' subsidized products after Japanese quotas were lifted, a Massachusetts cooperative used advertising, sampling, point-of-sale, and publications to differentiate its products from less expensive, lower quality foreign grape juices. These efforts, which used \$432,000 in MPP funds, helped establish U.S. Concord and Niagara grapes as the premium grape varieties used in Japanese juice production, resulting in an increase of 55 percent in U.S. grape juice exports in 1993.

U.S. sweet cherry exports reached their highest level ever in 1994—climbing to almost \$130 million—an 18 percent increase over the previous year. Japan, the biggest export market by far, saw an increase in shipments of 20 percent to \$92 million. This increase can be attributed to the extension of MPP activities outside Tokyo that expanded both the market and distribution for cherries.

U.S. exports of fresh and processed potato products reached a record \$485 million last year—nearly double the level of just five years ago. Again the MPP played a vital role. U.S. pear exports rose 39 percent last year, topping \$73 million. Pear industry officials estimate that exports for the 1994/95 season are already up an additional 38 percent, and that the increase in shipments can be attributed to the MPP.

TAPPING INTO MIDDLE-INCOME MARKETS

Middle-income or transitional markets are those that are making the transition from direct aid toward cash purchases. Here our program activities work to build on our past efforts under our aid programs. We work to build and maintain our competitiveness through programs such as the export credit guarantee programs, and

we work to combat the unfair subsidy practices of our competitors through programs such as the Export Enhancement Program, Dairy Export Incentive Program, and the Sunflowerseed Oil and Cottonseed Oil Assistance Programs. We also work to support the continued development of the scientific and technical expertise in these countries through exchange programs, and we operate market development programs that focus on market access issues, marketing research, product demonstrations, technical assistance, and buyer education activities.

Credit Guarantee Programs

The export credit guarantee programs help assure the availability of credit to finance commercial U.S. agricultural exports. These programs operate within a relatively narrow range of credit risk. The purpose is to underwrite export credit that would not otherwise be made by the commercial sector, but to avoid assuming so much risk as to compromise our reasonable expectation of repayment.

These programs are fully commercial in that private financial institutions extend financing at interest rates that are at prevailing market levels. The Export Credit Guarantee Program (GSM-102) guarantees repayment of short-term financing (6 months to 3 years) extended to eligible countries that purchase U.S. farm products. The Intermediate Export Credit Guarantee Program (GSM-103) guarantees repayment of intermediate-term financing (3 to 7 years) to eligible countries that purchase U.S. farm products. Under both GSM-102 and GSM-103, the U.S. government guarantees payment to U.S. exporters and their financial institutions if the foreign banks fail to pay. The guarantees encourage lenders to extend credit that is used by overseas customers to pay U.S. exporters.

In fiscal year 1994, sales registrations totaled \$3.1 billion for 37 countries under GSM-102 and \$140 million for five countries under GSM-103. Together these two programs have facilitated the export of billions of dollars of U.S. agricultural products since the guarantee programs were first implemented in the early 1980's.

As with all our export assistance tools, we try to use these programs to help exporters take advantage of emerging markets and trends. We, too, have been responsive to new trends. In the past few years, we have increased programming for countries' private sectors, as contrasted with programs for state trading organizations. For example, in fiscal 1994, Egypt's private sector GSM-102 program expanded coverage from wheat, flour and corn to include dairy products, frozen beef and protein meals.

Other efforts in fiscal year 1994 included Mexico's GSM-102 program that generated more than \$1.3 billion in export sales of U.S. agricultural commodities. Also in 1994, USDA targeted 13 countries in Latin American and the Caribbean—up from 9 the previous year. Sales registrations in this region totaled \$1.54 billion.

Subsidy Programs

However, just as we target transitional markets as opportunities for export growth, so do our competitors. And many of them resort to the use of unfair trade practices such as subsidies in order to make sales. The Export Enhancement Program (EEP) helps the United States meet this subsidized competition in targeted markets—particularly competition from the European Union.

The EEP has in many cases, increased, or prevented further declines, in U.S. exports; it has challenged unfair trade practices by others; and it has pressured our trading partners to engage in serious negotiations on bilateral and multilateral agricultural trade issues.

The EEP will remain an important part of our trade policy arsenal, and we will continue to use it—as the Administration pledged—to the maximum extent permitted under the subsidy reduction commitments provided for in the GATT Uruguay Round Agreement. Uruguay Round implementing legislation broadened the scope of the EEP program so that we no longer have to use it simply to combat unfair trade practices, so now we can use EEP for general market expansion activities, even as program funding gradually declines as required under the Agreement.

Last year, the Department awarded \$1.15 billion in EEP bonuses to support sales of bulk commodities, such as wheat, and value-added commodities such as wheat flour, eggs, vegetable oil and barley malt.

The Department also administers several other subsidy programs to facilitate export sales of specific agricultural commodities. These include the Dairy Export Incentive Program (DEIP), which facilitates export sales of dairy products, and the Sunflowerseed Oil Assistance Program (SOAP) and the Cottonseed Oil Assistance Program (COAP), which have been used to facilitate export sales of these vegetable oils. Sales under the DEIP in fiscal year 1994 totaled more than 133,000 tons of milk powder, butterfat, and Cheddar, Mozzarella and processed American cheeses. Fiscal year 1994 SOAP/COAP sales totaled more than 210,000 tons.

Under the Uruguay Round Agreement, the United States committed to reduce agricultural export subsidies over a 6-year period. For the United States, reductions in the quantities of products exported under our subsidy programs will be carried out on a July-June basis, beginning in July 1995, while the reductions in expenditures for export subsidies will be carried out on an October-September basis, beginning in October. As a result, the 1996 program levels for the EEP, SOAP and COAP will reflect the first phase of these reductions. However, funding for these programs has been provided at the maximum levels that are consistent with the quantity and expenditure reduction commitments required by the Uruguay Round Agreement.

International Cooperation

In the area of international cooperation, I'll mention only a few of the many projects we are involved in. Under the Cochran Fellowship Program, we provide high quality training for senior and mid-level staff from a wide variety of agricultural and food-related industries from middle-income and developing countries. Through this program, we strengthen and enhance trade linkages between the countries and agricultural interests in the United States. In fiscal year 1994, more than 550 Cochran Program fellows participated in agricultural and agribusiness training in the United States.

Let me give you a few examples to illustrate how this program aids our market development effort. In 1992, a Polish business executive participated in the Cochran program. As a result of the contacts he made during his time here, he imported more than \$500,000 worth of U.S. poultry products in 1993 and nearly the same amount in 1994. Two Colombian participants report that their newly formed trading company imports \$80 to \$90 million worth of U.S. agricultural commodities annually. They credit the Cochran Program with helping them establish crucial links with the U.S. agricultural community.

The program has proved crucial to expanding U.S. agricultural exports to Korea. Training provided to Korean government officials through the Cochran Program has helped improve Korean officials' understanding of U.S. sanitary and phytosanitary practices in areas such as grain, horticultural products, meat and lumber products.

In the area of international cooperation and development, FAS also conducts agribusiness promotion activities. Last year, an agribusiness opportunity mission to Hungary drew very favorable reviews from the U.S. firms that participated. Nine of the 13 U.S. firms made immediate sales, signed letters of intent, or identified potential purchasers and trade contacts. The mission generated \$4 to \$5 million in trade and potentially up to \$50 million in investment activities over the next few years. Agribusinesses from Michigan, Wisconsin, Virginia, New York, New Hampshire, Maryland and Kentucky participated in this mission.

BUILDING DEMAND IN DEVELOPING COUNTRIES

One of FAS' long-term responsibilities is the support of economic development in anticipation of building markets for U.S. exports. Two dollars out of every five that U.S. farmers earn in world markets are earned in developing markets—and these markets are where the biggest growth opportunities lie for U.S. agriculture in the 21st century. And if we are to reach our goal of a 50-percent increase in exports by the year 2000, we will need to tap into new, developing markets as well as build demand for U.S. products in existing ones.

Over the long run, improved use of natural resources and agricultural and private sector business development and investment increase jobs and incomes; they also make developing countries better customers for U.S. agricultural exports. Rising incomes support a diversification of diets and create a growth in food demand that out paces growth in domestic agricultural production.

Food Aid Programs

Let me briefly describe some of the program activities in this area. Market development in many countries, especially the low-income developing countries, begins with food aid. We play a role in the operation of three food aid programs.

The Public Law 480 program focuses on meeting humanitarian needs, providing calories and nutrients that can increase human productivity. USDA is responsible for policy formulation and program administration in carrying out Public Law 480, Title I credit sales activities. The Agency for International Development (AID) has similar responsibilities for the Title II donation and Title III government-to-government grant programs. USDA provided operational support to AID during fiscal 1994 for commodity purchases totalling \$580 million under Title II and totalling \$175 million under Title III. During fiscal year 1994, \$218 million of commodities under Title I were programmed.

Section 416(b) of the Agricultural Act of 1949 authorizes donations of uncommitted Commodity Credit Corporation (CCC) stocks to assist needy people overseas. For fiscal year 1994, the value of commodities donated under the Section 416(b) program, including contributions to the World Food Program, totaled over \$90 million.

The Food for Progress program provides commodities to developing countries and emerging democracies to encourage democracy and private enterprise, including agricultural reform. Commodities may be made available for Food for Progress programming through the use of Public Law 480, Title I funds or Section 416(b) authority. During fiscal year 1994, we provided commodities with a value of about \$113 million to support countries making commitments to introduce or expand free enterprise elements in their agricultural sectors.

Under the authority of the food aid programs administered by USDA and AID that I just mentioned, the U.S. Government programmed about 4.9 million metric tons of commodities in fiscal year 1994 with a commodity value of about \$1.2 billion. Additional assistance was provided through the payment of various transportation expenses associated with making the commodities available.

The major focus of USDA-administered food aid programs in 1994 included:

- USDA provided 860,000 tons of food assistance worth about \$226 million to the new independent states of the former Soviet Union. The bulk of this assistance was targeted at the Caucasus region where over 300,000 tons of commodities were shipped.
- A first time Title I program of \$8 million re-established exports of U.S. wheat to Angola following a debilitating period of civil strife. The agreement financed exports of about 13,000 tons of wheat and 13,000 tons of wheat flour.
- A \$15 million Title I program financed exports of 50,000 tons of U.S. rice to Cote d'Ivoire, which continued to leverage commercial sales of brown rice. As a condition of receiving the Title I assistance, Cote d'Ivoire has agreed to liberalize its commercial rice imports; however, their tariff is still a major trade deterrent.
- For the past two fiscal years, the National Cooperative Business Association has sold USDA donated commodities in the Tver region of Russia under Section 416(b) and Food for Progress. The proceeds have been used to improve and privatize the food processing and distribution systems throughout the region, and to develop long-term market potential for U.S. commodities. The Association supports U.S. technical assistance in milling, meat processing and other forms of food processing that will open up opportunities for U.S. partnerships and investments, while at the same time improving the efficiency of the Russian food distribution system and the quality and quantity of affordable food. Tverzernoproduct, the Russian entity responsible for transporting and distributing USDA commodities, is in the process of converting to a joint stock company. This company has the potential to be a private sector applicant under GSM-102 and to develop into a possible buyer of U.S. agricultural equipment and ingredients for feed preparation.

ACROSS-THE-BOARD ACTIVITIES

The FAS responsibility to represent the interests of U.S. farmers overseas is at the core of our mission. FAS maintains 75 offices overseas to fight unfair trade practices, improve market access for U.S. agricultural exports, carry out market development activities, and provide market intelligence and analysis in 132 countries.

This professional, dedicated field force is at the heart of another aspect of our agency mission: collecting, analyzing, and disseminating information to government policy makers, U.S. farmers and ranchers, exporters and others about global supply and demand, trade trends, and emerging market opportunities. This reporting and analysis system helps USDA make sound policy and program decisions and keeps the U.S. agricultural sector posted on global supply, demand and product movement.

Other activities that involve all types of markets are in the area of international scientific and technical cooperation. We are constantly seeking new knowledge and technology to benefit the United States and cooperating countries through research on food, agriculture, and forestry. We coordinate scientific and technical exchanges with many countries, particularly China, the former Soviet Union, East European countries, Ireland, Venezuela, and Mexico.

We also continuously monitor the activities of international organizations concerned with food and agricultural issues. Our role is to advance U.S. policy views and protect American agriculture.

BUDGET REQUEST

Mr. Chairman, there is no question that today's budget environment requires us to prioritize our activities. The level of funding available to FAS has essentially remained constant over the past three fiscal years, requiring that we take significant action to reduce costs. In this regard, we have reduced headquarters employment by 10 percent since fiscal 1993, lowered our domestic operating costs to pre-1990 levels, closed seven overseas offices and reduced operating costs at 14 others to offset higher operating costs, expand our presence in more promising markets, and provide the resources to meet changing market opportunities. As an example, we just closed our Agricultural Trade Office in London and will use the savings to help offset unavoidable overseas wage and price increases in fiscal year 1995.

At the same time, we have adjusted resources overseas to help U.S. exporters take advantage of emerging market opportunities. In the past several years, we have opened new trade offices in Mexico City and Osaka, Japan. We are constantly evaluating the distribution of our resources worldwide so we will be able to concentrate our resources where opportunities exist.

With the implementation of the North American Free Trade Agreement and the GATT Uruguay Round Agreement, we believe the future offers real opportunity for expanding U.S. agricultural exports, strengthening our ability to compete globally, increasing farm income for America's farmers and ranchers and contributing to the economic development of rural communities. We are proposing a fiscal year 1996 budget that represents an aggressive approach to the fundamental objective of increasing the value of U.S. agricultural exports by 50 percent by the year 2000. In this difficult fiscal climate, our export expansion initiatives represent a major opportunity to significantly improve farm income with a comparatively modest investment.

Mr. Chairman, the budget proposes a funding level of \$129.5 million and 923 staff-years, an increase of \$11.6 million and 15 staff-years above 1995 levels. The majority of this increase contributes to meeting the Administration's commitment to Congress to increase the program levels for "greenbox" and other GATT-consistent export promotion and related programs.

Specifically, our budget proposes to:

1. *Expand our overseas marketing and information base.*—A key Departmental priority is improving the economic development of rural America by increasing agricultural development and exports. To accomplish this, the Department has established the objective of increasing the value of U.S. agricultural exports by 50 percent by the year 2000. Moving toward this goal will require a greater USDA overseas presence to facilitate trade than is currently possible. The fiscal year 1996 budget includes \$4.4 million to open nine new overseas offices and expand six others in key international markets. After a careful examination, we believe that these markets represent an export expansion potential of more than \$3 billion. This initiative includes:

SUMMARY OF AGRICULTURAL TRADE OFFICE EXPANSION

Location	Action planned	Cost
Hamburg, Germany	Expand existing ATO	\$195,000
Shanghai, China	Relocate ATO from Beijing	413,000
Mexico City, Mexico	Expand existing ATO	217,000
Caribbean Region	Open new ATO	395,000
Sao Paulo, Brazil	Expand office and open as ATO	445,000
Moscow/St. Petersburg ..	Open new ATO	575,000
Durban, South Africa	Open new ATO	395,000
Abidjan, Cote d'Ivoire ...	Open new ATO	395,000
.....	Total	3,030,000

SUMMARY OF AGRICULTURAL COUNSELOR/ATTACHÉ OFFICE EXPANSION

Location	Action proposed	Cost
Mexico City	Expand existing office	\$222,000
Brussels, European Union	Expand existing office	425,000
Hanoi, Vietnam	Establish foreign service national staff	38,000

SUMMARY OF AGRICULTURAL COUNSELOR/ATTACHÉ OFFICE EXPANSION—Continued

Location	Action proposed	Cost
Manila, Philippines	Expand existing office	32,000
Kiev, Ukraine	Open new office	315,000
Almaty, Kazakhstan	Open new office	300,000
Bucharest, Romania	Expand existing office	62,000
Total		1,394,000

2. *Improve export promotion and trade services.*—Our proposal includes increases totaling \$4.8 million to restore market development funds, expand some of our most successful trade servicing efforts and enhance foreign marketing expertise. Specifically, the budget proposes:

—An increase of \$2 million over the fiscal 1995 level for the Cooperator Program that complements the ATO expansion initiative. This additional funding, coupled with matching funds from program participants, will stimulate market research, technical assistance and trade servicing activities tailored to meet the significant export opportunities these markets offer. In the post GATT environment, the Cooperator Program will continue to be an important tool in meeting our market expansion objectives.

—An increase of \$1.5 million for FAS funding for the Federal/State Market Improvement Program (FSMIP). FSMIP provides matching funds for State Departments of Agriculture projects intended to improve local marketing systems. The aim of the program is to reduce marketing costs for producers and, ultimately, improve their marketing opportunities. Under this proposal, FAS will develop projects designed to expand the predominately domestic focus of the current FSMIP to the international marketplace. Project activities will include developing innovative marketing techniques to seek outlets for farm products in the international marketplace and improving State expertise in providing services to encourage marketers into the export market.

—An increase of \$600,000 to expand FAS trade show and sales mission activities. From 1991–1993, U.S. exports increased an average of \$76 for every \$1 spent on trade shows and related market development activities. Additional funding will:

(1) Increase the number of sales missions to emerging high-value product markets from 3 to 6 per year.

(2) Increase the number of USDA-sponsored pavilions in international shows and solo shows from 5 to 10 per year, servicing an additional 200 exporters. This would allow us to add shows in markets such as Spain, Italy, Chile, Israel, and South Africa.

(3) Organize more educational seminars for U.S. exhibitors and foreign buyers. Educational seminars have proven effective for U.S. exhibitors and foreign visitors at trade shows. The educational component would be expanded at U.S.-solo shows to include more industry experts from the United States, as well as from the host country.

—An increase of \$500,000 to improve marketing expertise. There is a pressing need to develop an ongoing, long-term market training plan for program managers and marketing specialists to enhance management of the Agency's export promotion programs. The training program would focus on all phases of long-term strategic market planning—research, intelligence gathering, planning, implementation, and evaluation with an emphasis on current U.S. and foreign practices and philosophies.

—An increase of \$250,000 for the Cochran Fellowship Program (CFP) to support program expansion into Asia, particularly into Indonesia and the Philippines. Indonesia has the world's 4th largest population with a rapidly growing middle class. Its new deregulation policies make it especially promising for imports of U.S. agricultural products. In the Philippines, the CFP would be used to promote exports of U.S. livestock genetics, wood products, and other high-value agricultural products, as well as encouraging changes in food safety and inspection and other agricultural policy issues that affect trade.

3. *Ensure market access in accordance with GATT and NAFTA accomplishments.*—The budget includes an initiative to confront what could become a prevalent type of non-tariff barrier: sanitary and phytosanitary standards. Specifically, the budget proposes an increase of \$750,000 to establish a Sanitary and Phytosanitary (SPS) trade policy team. The primary function of this unit will be to focus the efforts

of USDA, other U.S. government agencies and U.S. industry in resolving technical barriers to U.S. agricultural exports before they become trade policy issues. Significant responsibilities of the unit will include:

Bilateral SPS Coordination.—Our inter-agency preparation and coordination in developing agendas for bilateral food safety and quarantine issue resolution will be strengthened.

International Organizations.—Our involvement in the standards-setting processes of international standards-setting organizations will be expanded to ensure that the focus on trade, including the scientific aspects of trading, is given full consideration.

WTO and NAFTA SPS Committees.—Activity in both of these committees can be expected to build, and coordination among agencies concerning U.S. positions will need to be strengthened.

Pesticides, Contaminants and Labeling.—The focus on pesticides world-wide and the flurry of activity by several important trading countries to establish residue standards for imports needs to be closely monitored. Working with our industries and the Environmental Protection Agency (EPA), we will strive to influence the standard-setting process in order to protect both the safety of consumers and our export markets.

4. *Improve our commercial credit tools.*—The budget includes an increase of \$548,000 to administer supplier credit guarantees that we propose to implement in fiscal year 1996. A program level of \$100 million has been established for this activity which will be carried out within existing statutory authority for CCC credit guarantee programs. Under this activity CCC will guarantee credit extended to foreign buyers on a short-term basis, and it will be oriented toward high-value products where we expect participation by a wide range of companies. This differs from other GSM-102 guarantees in that foreign banks and foreign bank letters of credit will not be involved in the transaction, but rather the foreign buyer alone will bear ultimate responsibility for repayment of the credit. The duration of the credit is also expected to be relatively short, generally up to 180 days. A wide array of countries are potential participants in the supplier credit guarantee activity because of the widespread need for additional liquidity of this kind.

5. *Administrative adjustments and cost reduction initiative.*—The budget proposes several administrative adjustments, including an increase of \$2.2 million to maintain our existing overseas agricultural counselor, attache and trade offices near current levels. Additionally, \$1.1 million is requested for fiscal year 1996 pay costs and \$449,000 to offset domestic inflation. In support of the President's executive order to reduce employment and promote the efficient use of resources for administrative purposes, the budget proposes a reduction of \$2.2 million, with additional projected administrative savings of \$519,000 associated with the proposed reduction in funding for the Public Law 480 Title I program.

FAS EXPORT PROGRAMS

Mr. Chairman, the commercial export programs we administer are expected to grow in importance as the market-opening provisions of the Uruguay Round agreement are implemented. Our program proposals provide the tools to meet these new sales opportunities, tempered by the need to reduce Federal spending.

For the export credit guarantee programs, the budget proposes a total program level of \$5.7 billion. This includes \$5.2 billion for the GSM-102 program and \$500 million for the GSM-103 program. As part of the GSM-102 program, the budget proposed two new activities to be implemented in fiscal year 1996: supplier credit guarantees that I discussed earlier, and facilities financing guarantees. Facilities financing guarantees will encourage the sale of facilities and related goods and services focused on barriers to trade of U.S. agricultural products.

For the Public Law 480 food assistance programs, the budget proposes a total program level of just over \$1.0 billion. This will support approximately 3.4 million tons of commodity assistance in 1996, a reduction of 400,000 tons from the revised fiscal year 1995 estimate. This reduced level results from constraints on funding for U.S. international programs and a refocusing of program priorities.

For the Market Promotion Program, the budget proposes a program level of \$110 million for fiscal 1996, the program level authorized through fiscal year 1997. Additionally, as part of the Administration's "greenbox" initiative, the budget proposes supplemental appropriations language to restore the program to its fully authorized level in fiscal year 1995.

For our subsidy programs, the budget reflects implementation of the terms of the Uruguay Round Agreement on Agriculture that require reductions in export subsidy practices. The CCC budget estimates assume that EEP bonuses of \$958.7 million

will be awarded in 1996. For SOAP and COAP, the budget assumes bonus awards of \$23.9 million, and \$116.9 million in bonus awards for DEIP, is assumed.

This concludes my statement, Mr. Chairman. I will be glad to answer any questions.

BIOGRAPHICAL SKETCH

AUGUST SCHUMACHER, JR.

August Schumacher, Jr., was appointed by Secretary of Agriculture Mike Espy as Administrator of the U.S. Department of Agriculture's [USDA] Foreign Agricultural Service on July 25, 1994.

Mr. Schumacher came to USDA from the agriculture group of the World Bank. His most recent assignment at the World Bank involved a series of projects on agriculture sector policy adjustment, forestry and biodiversity protection in Central Europe, Belarus, and Ukraine. In addition, he has worked in China, Latin America, and Africa.

Mr. Schumacher also served as Commissioner of Food and Agriculture for the Commonwealth of Massachusetts during 1985-90. During his tenure as Commissioner of Food and Agriculture in Massachusetts, Mr. Schumacher was heavily involved in the joint efforts of USDA and the National Association of State Departments of Agriculture [NASDA] to promote agricultural trade. He hosted the 1990 NASDA Food Expo in Boston and participated in several agri-trade missions to Europe and Japan. As Commissioner, he also fostered several State market development initiatives including the Women, Infants, and Children [WIC] farmers' market coupon program.

Mr. Schumacher is from a farm family in Lexington, Mass. He attended Harvard College in Cambridge, Mass. and the London School of Economics. He was a research associate with the Agribusiness Department of the Harvard Business School.

JAPANESE MARKETS

Senator GORTON. I must say once again, a little bit less than 2 years ago I went to Tokyo with the Washington State Apple Commission to help open up these markets for our apples.

And I have never been more impressed than I was with the two people whom I dealt with in our Embassy there from your service, their dedication and enthusiasm, their knowledge of what was going on in Japan, and their helpfulness.

They were magnificent public servants and I have remembered it for a long time. And I remember your organization fondly and favorably as well.

Mr. Moos, I can just say I am glad to see you are still here.

Mr. MOOS. Thank you very much. [Laughter.]

Senator GORTON. As I indicated earlier in my comments, we see this export demand growth as being very real. And the United States needs to be well organized to get its fair share of that.

And so we need our export policy tools, just as well as we need our domestic policy tools, if American farmers and American agribusiness are going to have an adequate and fair opportunity to compete in these growing markets.

Senator COCHRAN. Senator Gorton has been one of the leaders in the effort to help ensure that we broke down barriers to trade in so many of these areas, particularly Japan, with the apple market there.

And I think we have been very successful under your leadership in achieving some change and some good results.

Mr. MOOS. We certainly appreciated the Senator's support as we negotiated with the Japanese over the last couple of years on access to their apple market.

Senator COCHRAN. You don't happen to have the difference in the figures before we started this push and what they are now, in terms of total—

Mr. MOOS. They were zero before we started. [Laughter.]

Senator COCHRAN. We didn't sell any for a long time, right? There were all kinds of rules and impediments and hurdles. And finally those barriers have come down, in large measure due to the initiatives of the Department, Senator Gorton, and others.

The Senator mentioned that we have a vote on the floor. We have a vote in progress. We are going to stand in recess to go over and make that vote. We will come right back. I hope you can remain for some additional questions that we have of you.

We stand in recess.

[A brief recess was taken.]

Senator COCHRAN. The hearing will please come to order.

Instead of having just one vote, we had two. So that prolonged our absence from the subcommittee hearing. We apologize for that.

OUTLOOK FOR U.S. COMPETITIVENESS IN WORLD MARKETS

As Senator Gorton was asking some questions about our export programs, I think I will ask a couple of questions on that subject while we are on it, and then maybe go back to some other inquiries that I had.

I know that with respect to our current programs that are funded in this bill to try to help promote the sale of U.S. grown commodities and value-added commodities—the Market Promotion Program, specifically, and some of the other programs—we are constrained by the provisions of international agreements now.

We cannot subsidize our export efforts without recognizing these constraints. It concerns me to read and hear about plans that some of our competitor nations have for increasing or embarking upon new programs in this area.

The other day, someone told me that Canada has begun a program, or will soon begin a program to help subsidize wheat exports, and that this is a new program. I wonder whether or not we have any information about how widespread this is going to be.

Are signatories to the GATT and NAFTA agreements going to be more aggressive in going after existing markets or enlarging market share in those markets, or claiming markets where we have enjoyed a significant presence in the past?

What is the outlook in connection with farm competition activities in this area?

Mr. MOOS. Before I ask Mr. Schumacher to give you more information in that regard, I would like to make the comment that we know that, given the fact that this world demand growth is occurring, and on the scale that it is occurring, all the exporting countries are gearing up within the overall Uruguay round obligations and limitations to try to get a larger slice of that world market.

We are bound by the Uruguay round agreement in terms of what we can do, specifically in terms of export subsidies and those kinds of programs.

But as far as what we refer to as greenbox activities, there are not the same kind of limitations. So we are gearing up within the administration.

That was part of the administration's commitment to gain support for the Uruguay round agreement here in the Congress, that we will maximize and utilize all of the existing authorities to the extent permitted under the appropriation process to keep American farmers and agribusiness interests competitive in the world market to meet that competition which we know will occur.

And the same thing that you pointed out that may be taking place in Canada is going to be occurring in all of the major exporting countries.

We know that the European Union has in mind to provide much more indirect support, if you will, indirect support which escapes the limitations of the new Uruguay round agreement in order to assist their agricultural interests in gaining a larger share of the world market.

All that does is underscore the need that we need to be equally well organized here in the United States.

Gus, would you make some comments, please?

FOREIGN COMPETITIVE PRACTICES

Mr. SCHUMACHER. Mr. Chairman, thank you very much. I have three points. On Canada specifically—and Chris can expand on this if you wish, in their budget, they have proposed \$1 billion for a program that their own press calls "the sister of GSM-102."

In Australia, our good friends down under are doubling their trade offices in their most rapidly growing markets. When we look at our competitors in Europe, they are out-spending us 2 to 1 on a government basis and 6 to 1 when you add their often mandated produce checkoffs that they want to include.

Senator Gorton, I was going to mention that the EU alone, has \$89 million in subsidies just for wine. I certainly prefer some of the good wines from Washington State over some of the good wines from across the pond.

That is more than the entire budget this year for the Market Promotion Program. So this competition is really heating up in a post-GATT environment.

That is why I am just delighted that the administration has put forward an aggressive greenbox effort to compete straight up in a post-GATT era. It is going to be extremely competitive out there, Mr. Chairman.

It is going to focus on trade promotion, on our credit programs, again, with our cooperative programs, where we have done such a good job. These are all eligible under the Uruguay round agreement to be supported by our producer groups and by the U.S. Department of Agriculture.

Mr. MOOS. Could I ask the general sales manager to make some comments in that sense as well?

Senator COCHRAN. Indeed. Mr. Goldthwait.

Mr. GOLDTHWAIT. Mr. Chairman, thank you.

The Canadian program is basically a \$1 billion Canadian—that is roughly \$700 million in United States currency value—support program for their wheat exports. It represents a governmentally supported program which augments the credit that is given by the Canadian Wheat Board.

I think it is an excellent example of the determination that our competitors have to develop tools that are legal under GATT arrangements, to be competitive, and to come head to head to us in all markets.

Senator COCHRAN. Well, I hope that you will be able to help us by developing a paper on this or a listing of all of those activities that you are aware of and how much money is being dedicated by our competitors to these activities.

We are going to be confronted with a very tough challenge when we get to the floor with this bill, or we may be confronted with it here in the committee, to approve the request that is contained in the budget for the Market Promotion Program and some of the other so-called greenbox activities.

We are going to have to win that argument. And to do it, we need facts. These are very persuasive facts, in my opinion, and will help Senators understand what we are up against and how important it is for us to meet this challenge.

If you could do that for us and supply for the record some good arguments, talking points, facts, whatever you can give us that are accurate. There is no need to exaggerate. Just tell us what the facts are. The facts will sell themselves.

Mr. GOLDTHWAIT. OK.

Mr. MOOS. We will supply that information to you directly, Mr. Chairman.

Senator COCHRAN. Now I will recognize my distinguished colleague from Wisconsin who has joined the subcommittee hearing for any comments or questions he might have. Senator Kohl.

Senator KOHL. I thank you very much, Senator. I am pleased to be here today. And I have two questions, one for Mr. Ackerman and one for Mr. Schumacher.

GROUP RISK PLANS FOR FORAGE

Mr. Ackerman, with the passage of comprehensive crop insurance reform legislation last year, both farmers and USDA officials have had to deal with big changes. In general, I think the changes are for the better.

If we can get more farmers planning for future disasters by buying crop insurance, we can significantly reduce the cost of emergency disaster assistance to taxpayers.

In my own State of Wisconsin, dairy farming is the predominant form of agriculture. And many of the dairy farmers in my State grow their own forage. Forage production is very difficult to measure, and most producers do not have exact records of prior-year forage production.

In response to concerns raised by farmers of Wisconsin about the crop insurance program, you have made some helpful changes. And I want to thank you for those efforts.

One issue that has been left unresolved, however, which I hope can be addressed next year, is the group risk plans for forage, or CAT policies. In the past, group risk plans have been offered for forage in most Wisconsin counties.

As you know, these group plans allow farmers to be indemnified based on countywide production losses instead of having to show such detailed records individually.

The group plan not only cuts down on the redtape to the farmers, but it greatly simplifies the work of your own employees at the local levels as well.

I would like to be able to tell the farmers of my State that you will be offering a group risk plan for forage next year. Can you tell me that I can tell them that? [Laughter.]

Mr. ACKERMAN. I can tell you that it is something that we are seriously looking at. And if I can explain very briefly, in the first year of crop insurance reform we did not offer the group risk plan on catastrophic coverage on any crop. The reason was a matter of consumer protection. A group risk plan works differently than most insurance in the sense that normally an insurance contract is an individual affair. If you have an individual loss on your farm, you are covered. That is the difference that we try to draw between insurance and disaster aid.

Group risk works a little bit differently. You can have situations in a county, if losses are not uniform, of a farmer who has a loss and does not get a payment, or vice versa, a farmer who does not have a loss and gets a payment.

We felt that, for our catastrophic coverage where we are dealing with farmers who have not been in insurance before, who may not be experienced at it, there were dangers in offering this in the first year.

The one crop for which the benefits of a group plan seem to clearly outweigh the negatives is forage, because, as you have noted, on the group risk plan, when farmers fully understand what they are buying, when it is done properly, it is much more user-friendly and it is much simpler on recordkeeping. It addresses some of the traditional problems we have had with forage coverage. In the past, individual forage coverage has had very low participation because of the kinds of problems you have been discussing.

So I think what I can say is, if we offer catastrophic group risk coverage next year on anything, it would be forage because forage is clearly the best candidate. It is something we have heard a lot of interest on. And it is something that we are very seriously looking at.

Senator KOHL. All right. I think that is a good answer. It is encouraging. And I will pass that information on. I appreciate that.

Mr. Schumacher, in the post-GATT world farmers in our own country have had to be much more attentive to world markets than they have been in the past.

Our markets have been open to our competitors abroad, and likewise we have the potential to gain new markets abroad for our own agricultural products. Since before the GATT vote, I have had a concern about certain State-sanctioned trading enterprises operated by competitor nations such as New Zealand.

In a 1994 USDA publication entitled "Dairy World Markets and Trade," USDA calls the New Zealand Dairy Board "an unreformed and an anticompetitive entity."

The New Zealand Dairy Board is a statutory export monopoly which has the advantage of sole-sourcing and pricing rights on New Zealand dairy products that are destined for export markets.

As a Senator from Wisconsin, I have some obvious concerns about this in terms of unfair competition with our own dairy exports.

Article 17 of the GATT requires that such trading enterprises operate in "such a manner consistent with the general principles of nondiscriminatory treatment described in the agreement."

So I have two questions for you regarding this concern. First, would monopolistic State trading enterprises like the New Zealand Dairy Board be allowed to continue with their current practices, or will USDA use its power through the World Trade Organization to push for reform?

And second, in conjunction with the first, how does USDA intend to monitor these State-sanctioned trading entities, Mr. Schumacher?

STATE TRADING BOARDS

Mr. SCHUMACHER. Thank you. In response to your first question. Yes; we will be monitoring this very, very carefully under the new WTO Ag Committee as it gets organized.

There are three State trading boards we are monitoring very carefully. Of course, for the Canadian Wheat Board—as you know, we have the Joint Commission. Their first report should be out on June 15.

Second, our good friends in Australia on the Australian Wheat Board are active in this PAC Rim market on the wheat issue. And we are monitoring them extremely carefully.

And, finally, the New Zealand Dairy Board is actually, according to the New Zealanders, owned by the dairy cooperatives and the dairy farmers, although it is what I call single desk trading and, therefore, they are not transparent in the way they export their products.

So while under the new Uruguay round State trading is not illegal, we are going to be monitoring the export subsidies that may be transparent and nontransparent under the WTO.

So those are very good questions. We are going to be monitoring it very carefully. Mr. Moos may have further comments on that as well.

DAIRY EXPORTS

The other thing I want to mention that is very important is that we are now going to also change the regulations, if we get the final comments very shortly on the Dairy Export Incentive Program.

What is fascinating to me is the changes in dairy exports that have taken place over the last few years. We begin to get a little more competitive.

And I think the DEIP, or Dairy Export Incentive Program, has played a major role in getting us competitive on the world market. Butter, for example, is extremely short right now. We could sell more, if we had it, on the overseas market.

Senator KOHL. All right.

Yes, Mr. Goldthwait?

Mr. GOLDTHWAIT. If I could add just one comment, Senator Kohl. We thought that we took a big step forward with the announcement of the DEIP for this year, where we included certain PAC

Rim destinations for receiving limited quantities of our dairy exports. And we were able to apply our subsidies to those exports.

So we believe that we are at least getting the attention of the New Zealand Dairy Board with this kind of activity. We also think that long term we have the ability to be competitive in some of the PAC Rim markets with some of our own dairy exports with limited or no subsidies.

Mr. Schumacher has mentioned butter, where already this year we are finding that we are exporting with no subsidy.

Mr. MOOS. During—if I may, Senator.

Senator KOHL. Yes, Mr. Moos.

Mr. MOOS. During the Uruguay negotiations, of course many countries focused on the export subsidy programs of the United States and the European Union as being disruptive in the world markets.

As a consequence of that, some disciplines were developed in the Uruguay round agreement to provide for some discipline in that type of activity.

Accordingly, we are equally interested in focusing international attention upon the single desk kind of monopolistic pricing arrangements where there is potential for differential pricing to different markets around the world. We feel that that is another area that needs international focus.

Senator KOHL. I thank you very much.

And, Senator Cochran, I thank you very much for holding the hearing and for giving me the opportunity to be here.

Senator COCHRAN. Thank you, Senator, for your contributions. Senator Bumpers.

LOAN RESOLUTION TASK FORCE

Senator BUMPERS. Thank you, Mr. Chairman.

I want to, first of all, ask Mr. Buntrock about the task force that the Agriculture Department set up at our insistence to be more aggressive on all of these delinquent Farmers Home Administration loans. There is \$2 billion in delinquencies we didn't feel were being aggressively pursued for collection. Consequently, we set the task force up.

But I am advised of two or three things, and I would like for you to comment. No. 1, of the \$2 billion in delinquencies, \$1 billion has been charged off.

No. 2, the task force so far has collected \$20 million.

No. 3, the Department has said that instead of just collecting or trying to pursue collections of \$1 million or more—which was the original purpose of the task force—they now want the task force to pursue all delinquencies.

Would you comment on all three of those?

Mr. BUNTROCK. Yes, Senator Bumpers; I will tell you that I just recently, in the last few weeks, became more familiar with this loan resolution task force as it has become a part of the farm credit arm of the Consolidated Farm Service Agency.

We will still dedicate the personnel at the Washington level to make certain that these \$1 million and greater loans are pursued. However, it will become a normal part, even though prioritized, of the ongoing operations in each respective State where smaller de-

linquent loans are located. It will be a priority, full-time operation at the national level, but it will be more integrated with the existing system that we have in the field, as opposed to being set up on an ad hoc basis.

In terms of the dollar amounts, I will have to ask Lou Anne Kling here in a minute to give you the numbers.

But I do want to comment on the other part of your questions which dealt with whether the role of this loan resolution task force has been expanded not only to focus on these delinquent loans but also to cover all future loans that become accelerated in that category.

And in answer to that, we have made a decision that this loan resolution task force effort will not concentrate on these active loans as they become delinquent or fall into a status of acceleration. That will be done through the normal course of business.

Senator BUMPERS. In other words, the normal course of business being the State and local FmHA offices or the U.S. attorney's office.

Mr. BUNTROCK. Yes, sir; what I am really referring to is that in each individual State, the farm credit arm of CFSA has responsibility not only to service existing loans but also to handle delinquencies. And if some loans get into that category they will fall to the U.S. attorney's office.

The point that I am making is that, while I am not sure what may have been intended before or how far this might have gone, you were correct early on that as loans fell into the category of becoming delinquent or accelerated, they were going to the loan resolution task force. That will stop. We are no longer going to do that.

And the reason that we are not going to do that is that we believe very strongly in the responsibility delegated to each of these State directors to make certain in the normal course of operation that loans are serviced and followed-up and producers are worked with and that we do have accountability. They will focus on that as a normal part of their overall responsibilities in each State.

The \$1 million and larger loans that we have talked about will be dealt with by this group that will be dedicated to them, this small task force in Washington. There will be maybe four or five people that will be dedicated to looking after these \$1 million and higher loans, as you earlier had understood. That is the way we are setting it up now to operate.

Senator BUMPERS. Mr. Buntrock, how many people are now employed in this task force?

Mr. BUNTROCK. From the numbers that I have looked at, there were initially 10 or 11 people at the national level and 140 dispersed throughout all of the States.

Senator BUMPERS. Is that another layer of bureaucracy? Are these all new employees?

Mr. BUNTROCK. No, Senator; as I understand it, these 140 employees at the State level were former Farmers Home employees who were reassigned—

Senator BUMPERS. To this task.

Mr. BUNTROCK. To this task at the State level.

Senator BUMPERS. Well, how many people in the office of USDA in Washington are involved in this?

Mr. BUNTROCK. Initially, as I understand, there were approximately 11 people, according to the numbers that I have looked at.

The number that they currently have in place today that are coming over to CFSA—the number that was transferred over from Rural Economic and Community Development was four.

Senator BUMPERS. If you would, Mr. Buntrock, I would like for you to answer this question in writing, giving me a general idea of what is going on there.

What I want to know is this: I favored this task force and even suggested to Secretary Espy that he set one up. I want to be sure that it is a money saver and that these loans are being pursued. And I don't want another bureaucracy.

We ought to use existing resources, such as the U.S. attorney's office, where appropriate, to collect these delinquent loans.

But I just wanted to get an idea of how well that task force was working and so on. The task force was set up last October, is that correct?

Mr. BUNTROCK. Yes, sir; I believe it was set up last October.

CROP INSURANCE

Senator BUMPERS. Mr. Ackerman, I have a question regarding the \$50 per farm crop fee for catastrophic coverage. Is that just a processing fee and not really a premium?

Mr. ACKERMAN. That is correct.

Senator BUMPERS. To what extent does that cover all of your costs of processing?

Mr. ACKERMAN. Senator, we expect that the processing fee this year will bring in, in total, somewhere in the range of about \$40 million, both to private companies and to CFSA offices, to cover the cost of administering the program.

It covers part of the cost of program delivery. Obviously, it doesn't cover the cost of the risk management under CFSA.

Senator BUMPERS. Yes.

Mr. ACKERMAN. There are additional costs that the private companies and CFSA offices have. But that is the incremental amount in the budget for covering the administrative cost. That is what the \$50 fees go for.

Senator BUMPERS. Have you considered, or has the Department considered possibly letting these farmers opt out of the catastrophic program, if they chose, by signing a waiver that they would not be eligible for disaster assistance under any circumstances?

Mr. ACKERMAN. No, sir; we have not. That option was discussed last year when the bill was being considered. And the general concern that was raised was that if you have 2 or 3 years of very good weather, and a good number of farmers did, in fact, choose to opt out of the program, you could have a third year with very bad weather with a large number of farmers who would be uncovered.

At that point, Congress would not be able to provide disaster aid because of the new procedural roadblocks against crop disaster aid in the legislation. So either those farmers would be out in the cold, or else you would create very severe political pressures to unravel the program.

That concern, incidentally, was one of the reasons we felt that we had to have a processing fee that was reasonable, that was quite

low. The \$50 was designed to be a very accessible, very economical fee.

Senator BUMPERS. I may submit to you a question in writing and let you elaborate on that a little bit more for me.

Is it Mr. Schumacher?

Mr. SCHUMACHER. Schumacher.

EXPORT ENHANCEMENT PROGRAM

Senator BUMPERS. Mr. Schumacher, the Export Enhancement Program was established in 1985. And I voted for it. And as you know, the biggest item in the EC budget is agricultural subsidies.

Now, I'm not talking about apples and apples here, because I am talking about EC agricultural subsidies as opposed to our subsidies. But I am saying their subsidies make them tough competitors in the export market.

And so, to give our farmers a little boost, we set this up. What is the request this year?

Mr. SCHUMACHER. \$959 million.

Senator BUMPERS. What is the 1995 figure?

Mr. SCHUMACHER. \$800 million.

Senator BUMPERS. Now, I am told that 80 percent of that money last year went for wheat exports. Is that true?

Mr. SCHUMACHER. About 72 percent.

Senator BUMPERS. And yet our share of the world's wheat market is exactly where it was in 1985.

Now, would you answer the question by saying, "Yes, but if we hadn't spent this money, we would have lost our share. We are just holding our own with this"?

Mr. SCHUMACHER. We are——

PHASE DOWN OF SUBSIDY PROGRAMS

Mr. MOOS. If I may intervene here, at this point: Yes; without the program our share would have fallen. In fact, even with the program our share fell.

And it is simply a tool that was used to make American farmers competitive in the world market with the European Union. It was also designed to bring them to the negotiating table under the Uruguay round.

We were successful in that effort. Disciplines were established for the phase down of this kind of market intervention internationally. We are on the path to phasing down the use of the program in that sense.

I might say that the European Union with the reforms of its common agricultural policy no longer is the same kind of aggressive competitor in the world market that it was a few years ago.

So a combination of events have come into play here which we think was assisted by the operation of this program.

Senator BUMPERS. How many years have we given FAS and other western European countries to phase out these subsidies?

Mr. MOOS. They are actually not being phased out under the Uruguay round agreement. They are being phased down. The fact of the matter is that the Europeans will probably reduce their subsidy activity much faster than is called for under the Uruguay round agreement.

Senator BUMPERS. Well, can we expect a diminution then in requests from the Department for the Export Enhancement Program accordingly?

Mr. MOOS. It depends on the competitive practices of the other exporters in the world market. We still feel that there is a need—

Senator BUMPERS. Who are the exporters of wheat who are not members of GATT?

Mr. MOOS. There are no major exporters that today—

Senator BUMPERS. Well, I don't understand your last statement then.

Mr. MOOS. Well, what I am saying, really, is that we compete in the world market not only against the European Union, but we compete with the Australians, with the Argentineans, with the Canadians as being the major other wheat exporters in the world market.

They have different kinds of marketing assistance policies in those countries. And if needed, we would need to have the EEP as a tool to make certain that American farmers, American wheat-growers are not disadvantaged by some of their competitive practices.

MARKET PROMOTION PROGRAM

Senator BUMPERS. Now, Mr. Moos, since we are on this subject, let me ask you also—you are asking for almost \$100 million again this year, I think, on the Market Promotion Program, is that correct?

Mr. MOOS. Yes.

Senator BUMPERS. As you know, I tried to kill that in this committee last year, and I tried to kill it on the floor, and probably will again this year. You hear a lot of talk about corporate welfare.

That is classic corporate welfare, is it not?

Mr. MOOS. Let me refer to Mr. Schumacher for a response to that question.

Mr. SCHUMACHER. Senator, we were discussing this earlier. And one of the key issues is our competitor practices that Mr. Moos referred to, the EU, for example, on wheat.

The EU alone spends \$89 million on subsidies for wine. And last year I looked at the record—and you mentioned Arkansas wine.

The European Union subsidizes its wine exports by \$89 million. The entire MPP Program for this year is \$85 million.

This year we have made a number of changes. One of those is to simplify the regulations. But also, under the Budget Reconciliation Act, we will focus our promotion efforts more on medium and small firms.

We are looking at that very aggressively this year. And we looked at the actual number of larger corporations that received modest funds under this program. There were only about a dozen last year. The year before had 10. This year, larger corporations will receive about 4 to 5 percent of the total MPP money.

The bulk of this money is going to smaller firms and cooperatives to meet the competition that we will need to face as we move into a post-Uruguay round.

It is a very important issue. The Canadians are, of course, aggressive in their new programs that they are putting out. The Australians have opened up 30 offices in the fastest growing markets, which are in the Pacific Rim. We must be there.

Senator BUMPERS. Now, when you are talking about cooperatives, that sounds like a rather small, benign thing. But you are talking about some pretty big organizations, aren't you?

Mr. SCHUMACHER. Some of them.

Senator BUMPERS. For example, Sunkist, isn't that a cooperative?

Mr. SCHUMACHER. Sunkist is a cooperative. Ocean Spray is—

Senator BUMPERS. Haven't they been a beneficiary of this program?

Mr. SCHUMACHER. They have been a beneficiary of this program.

Senator BUMPERS. Do you think they can't fend for themselves?

Mr. SCHUMACHER. I think they are being phased out in single markets. Under the new regulations, the larger farms and cooperatives will be phased out.

But again, the cooperatives themselves, the large ones we have been able to identify—about 8 percent, 7 percent of the total MPP funding for this past year.

Senator BUMPERS. Mr. Moos.

CHANGES IN THE MARKET PROMOTION PROGRAM

Mr. MOOS. Yes; if I may make a comment here, we are reorganizing and refining our Market Promotion Program, as a consequence of the advice of you and other members of the Appropriations Subcommittee.

We are redesigning in an attempt to direct the support of that program more to small and medium-size businesses, businesses or companies which don't have overseas representation which could benefit from some assistance from the United States, whether it be in the form of direct support under the MPP Program or through enlarged activities of the Foreign Agricultural Service, providing them with the information and the assistance needed to penetrate that growing world market.

Earlier I commented on the fact that there is severe competition developing for the emerging demand from some of these rapidly developing countries.

And the United States will need to use all of the tools in its toolbox, if you will, in order to compete and to carve out a fair share of that growing demand for the United States.

We look upon the MPP Program as a very important part of that effort, again, to focus the assistance to help the small and medium-sized companies, which really do need assistance.

Senator BUMPERS. Let me just close, Mr. Chairman, by saying that I voted for GATT with some reservations. And one of the reasons I did is, I thought we were going to get rid of programs like EEP.

Mr. MOOS. Well, I want to make the distinction—the Export Enhancement Program is a direct type of subsidy program, which in effect discounts the value of American products and—

WHEAT EXPORTS UNDER EEP

Senator BUMPERS. But you have big winners and losers in that. You just told me 73 percent of it goes to wheat farmers.

Mr. MOOS. Well, you have some—

Senator BUMPERS. How much goes to rice? I have a passing interest in that. [Laughter.]

Mr. MOOS. Given the changing kind of world supply and demand situation, as well as the changes that are going on in the European Union, at this point in this market year we have been able to increase the amount of wheat exported under the program at a cost of only about 50 cents on the dollar of what it cost us last year.

So, given any chance at all, we are going to manage that program in the most acceptable manner, considering the fact that these are public funds that are being used for export assistance and export development.

But we are dedicated to getting the biggest bang out of the buck that we can for the taxpayers under this kind of a program. And we are committed to keeping American farmers competitive in the world market.

PUBLIC LAW 480 FISCAL YEAR 1995 RESCISSION PROPOSAL

Senator COCHRAN. Let me ask you a question about the President's proposals and the supplemental appropriations and rescissions bill that we are expecting to receive from the House any day now.

The President has submitted requests to the Congress to rescind about \$150 million of previously appropriated funds for Public Law 480 activities. These are specifically in titles I and III.

We also note that the budget request for the next fiscal year includes further reductions in Public Law 480 funding for titles I, II, and III.

We need to know, for the record, before we proceed to a markup on this rescissions bill, which countries are going to be affected by this, the extent to which they will be affected, and what effect these rescissions would have on commodity sales in these countries.

There are some other questions that I am going to submit in writing. But this is a matter of some urgency. We need to know the answers to these questions so we can make good quality decisions on this proposal.

We would like to be cooperative in the effort to reduce spending and to try to find ways to economize. But it strikes us as very inconsistent for this administration to give us a letter and strong statements last year about title III of the Public Law 480 program, and then turn right around this year and request substantial rescissions in the funds requested and which administration officials said were absolutely indispensable last year to meet multiyear agreements, on and on.

This is a letter I got from Brian Atwood, who talks about how important this program is. He is Director of AID. And then to see a complete turnaround in policy on this raises questions. And we need to know what is going on.

Why the big flip-flop?

Mr. MOOS. Well, Mr. Chairman, I don't have with me a list of the specific countries that will be impacted by this rescission recommendation. We will be very happy to supply the list, as well as the answers to any other questions that you have in this regard.

Senator COCHRAN. Thank you.

[The information follows:]

FUNDING FOR THE PUBLIC LAW 480 PROGRAM

The Administration's budget request for our major international food aid program, Public Law 480, is a clear reflection of the extraordinary pressures on the U.S. budget. This pressure is especially great on the International Affairs Function (150) account, which often does not receive wide support in Congress. In accord with the Public Law 480 authorizing legislation, Public Law 480 is not part of the agricultural account (350) but rather is part of the international affairs budget. This places the Public Law 480 budget in this very constrained account which must fund such other international affairs priorities such as the U.S. contributions to multilateral development banks, the IMF, the Eximbank, support for the newly independent states of the former Soviet Union, the Central and Eastern European countries, and Economic Support Funds for Israel and Egypt. In the final analysis, within the Executive Branch, the pain of cutting in the 150 account has to be shared by many programs, and Public Law 480 was among these.

The Administration's proposed \$92.5 million rescission for Public Law 480 Title III in fiscal year 1995 would permit a program of \$64.9 million. With this limited amount of resources, we will provide funding for very high priority programs in Ethiopia, Mozambique, Bangladesh, Guyana, Haiti and Honduras.

At the funding level proposed for fiscal year 1996, USAID has indicated that previously planned multi-year Title III programs that would not be funded under this appropriations level are in Bolivia, Ghana, Nicaragua, Senegal, Sri Lanka, and Uganda. USAID will give greater priority in allocating food aid to those countries that need food most and, within those countries, will concentrate on programs with direct linkages to increased agricultural production and consumption. For fiscal year 1996, we are proposing funding programs for Ethiopia, Mozambique and Haiti. These countries are among the poorest in the world.

Clearly, a reduction of this magnitude in the Title III program will result in a major shift of priorities and a greatly reduced number of countries receiving Title III commodities. However, the need to reduce the budget forced us to reduce funding levels. In order to accommodate this major shift and in order to make the most effective use of highly constrained resources, USAID recently tightened its allocation criteria to focus Title III on countries based on the following criteria: relative food need, special Administration priorities, and ongoing Mission commitments.

SUPPLEMENTAL FOR FORMER ASCS

Senator COCHRAN. On the subject of the ASCS supplemental, there is a \$10 million supplemental the House is recommending which is unrequested by the administration. We need to know whether the Department has taken any action on its own up to now to deal with an estimated shortfall in funding.

We understand one factor could be the cost of crop insurance, which Mr. Ackerman talked about earlier.

If ASCS faces such a severe shortfall in funding, why hasn't the President requested a supplemental to meet its salaries and expense requirements?

Mr. MOOS. I will refer to Mr. Buntrock here. But generally speaking, this reflects the extraordinary budget pressures this administration is under in trying to come forward with recommendations on how best to support these programs.

Frankly, the Department did put the recommendation forward to OMB for that kind of support. But OMB, looking at the overall picture of budgetary pressures, felt that there were more urgent needs or higher priorities for that request.

Senator COCHRAN. Mr. Buntrock, do you want to add something?

Mr. BUNTROCK. Yes; if I might respond just very briefly to the question of the supplemental for fiscal year 1995. The funding level that we are at, overall, in CFSA for 1995 is, as you indicated, the total of individual budgets from each respective former agency. It will all come together as one budget for 1996.

The NAP portion of the crop insurance reform, that is the uninsured crops, was not funded in any salary and expense column for 1995. Nor was the CRP signup that we will be having in 1995 included in 1995 funding. What that means is that we will be doing things with fewer people than we would normally have had to perform these functions.

It is not going to mean a discontinuance of services in the county offices. We have prioritized during this period of signup, which ends on April 28 in all of the county offices, to hire temporary people as needed for the crop insurance effort, as well as a normal program signup. But it is going to mean that we are going to delay some things in 1995 that we normally may have done.

And when I talk about delaying some things, one of them is the GIS Project that we have worked on for some time. It is a new technology for land identification. We will delay projects like that.

It will mean, in a lot of our county offices, that there will be shift work done. We will be working overtime. We will be doing a lot of things like this to get through the 1995 fiscal year.

So that is basically what it is going to mean. We will continue service. When we get to the end of the year, depending on what the weather does—if we have more of the type of weather we have had in California which triggers the uninsured crop coverage, it may mean that we will be looking at things such as furloughs.

We have used most all of the resources available to us to get as far as we are. In the buy-out that I referred to earlier, we have bought out approximately 811 people in total under the Consolidated Farm Service Agency. And we intend to buy out more.

In addition to that, there is attrition. So it is a combination of all of these tools that we are using, and at the same time redirecting a lot of our efforts to achieve the needed savings.

It is a question, as I said earlier, not of being unable to do the work, but of the timing that is so critical in terms of how we go about doing it.

Senator COCHRAN. I wonder about the priorities of the administration. I notice that a request that you submitted for additional funding for salaries and expenses of the Food Safety and Inspection Service was approved.

But, when it comes to the programs for farmers out there, OMB didn't approve that supplemental request, making you do these other things.

Mr. BUNTROCK. We did get a bit of additional funding, Mr. Chairman. Mr. Ackerman can speak much better about this in detail, but the category in the Federal Crop Insurance Corporation account for research and development does include support for some of the training that we did in preparation for the new program. We will receive approximately \$4 million to offset some of the training costs that we have had in 1995. As you can imagine, we have a lot

of training in place in 1995 to deal with all of the changes and so on that we have in connection with crop insurance reform.

Senator COCHRAN. We need to make OMB more farmer friendly. [Laughter.]

Let me say that I appreciate so much the cooperation of this panel of witnesses being here and answering the questions as you have.

SUBMITTED QUESTIONS

This has been a very informative hearing for the subcommittee. We will do our best to work on the budget requests and come out with a good work product. We will submit additional questions in writing to be answered for the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

**CONSOLIDATED FARM SERVICE AGENCY
QUESTIONS SUBMITTED BY SENATOR COCHRAN**

STATE MEDIATION GRANTS

Question. For fiscal year 1995, the Administration proposed to terminate funding for mediation grants. The fiscal year 1996 budget proposes to continue funding for this program at the FY 1995 enacted level of \$3.0 million. Why are you proposing funding for a program you thought to be unnecessary last year?

Answer. The Administration's fiscal year 1995 budget did not request funding for the mediation program. After the Agriculture Appropriation hearing, the agency was encouraged to continue this cost effective and popular program.

This program was included in Vice President Gore's "National Performance Review," as an example of a Federal program that worked well. Studies show that for every dollar spent on the mediation program, nearly \$4.50 is saved in unnecessary appeal and legal costs.

During the House of Representatives review of the State mediation program on April 12, 1994, a number of State government witnesses from farm States all over the country testified on behalf of the mediation program. The possible demise of the program generated letters in support of the program from private bankers as well as the Farm Credit System.

Section 282 of Title II of the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 P.L. 103-354, expands the State Mediation Program to include wetland determinations, conservation compliance, agricultural credit, rural water loan programs, grazing on National Forest System lands, pesticides, and other issues the Secretary deems appropriate.

The Agency supports the mediation program that has proven itself as both an efficient and cost-effective alternative dispute resolution process throughout the U.S. judicial system, other Federal Agencies, and within USDA itself.

SALARIES AND EXPENSES

Question. The budget request for salaries and expenses of the Consolidated Farm Service Agency includes savings of \$5.64 million in administrative costs and \$616,000 for FTS 2000. Please provide a breakdown for the committee of where these administrative savings will be achieved.

Answer. It is anticipated that administrative savings will be achieved through the consolidation of farm-oriented services into one agency to produce administrative efficiencies through economies of scale and by reducing and prioritizing overhead-type outlays in program support functions. This includes

such items as travel needs, site visits, informational meetings, shipment of goods, overnight delivery service and parcel post services, software leases, printing requests, outside contractor training, computer services, supplies and other materials, and leased equipment and rentals.

Question. How was the savings of \$616,000 for FTS 2000 calculated?

Answer. The Department's share of the savings for FTS 2000 was \$5.5 million. The CFSA's share of this savings was \$616,000 reflecting a pro rata share of the FY 1994 actual expenditures for FTS 2000.

Question. Will the increase of \$15.777 million requested for FY 1996 pay cost increases fully cover all projected pay increases, including annualization of the 1995 locality pay and any FY 1996 locality and general pay increases?

Answer. The increase of \$15.8 million requested for FY 1996 pay cost increases will not fully cover all projected pay increases.

CREDIT SALES OF INVENTORY PROPERTIES

Question. The fiscal year 1996 budget request includes \$45 million for the sale of inventory properties. It is my understanding that when a property is taken into inventory, the CFSA must allow the U.S. Fish and Wildlife Service to take a conservation easement on that property. Does the CFSA oversee the Fish and Wildlife Service's activities on these properties?

Answer. In accordance with §335(g)(1) of the Consolidated Farm and Rural Development Act (CONACT) (7 U.S.C. 1985(g)), the Agency is required in the case of real property disposal to establish perpetual wetland conservation easements to protect and restore wetlands or converted wetlands that exist on inventoried property, as determined by the Secretary in accordance with title XII of the Food Security Act of 1985 (16 U.S.C. 3801 et seq.).

In placing conservation easements on wetlands on its inventory properties, the Agency usually secures an easement manager such as a Federal or State conservation agency. In the majority of cases, the U.S. Fish and Wildlife Service (FWS) is named as the easement manager as there are not many other Federal or State agencies willing to assume this responsibility.

If the FWS is named as the easement manager, then the interest in the conservation easement becomes part of the National Wildlife Refuge System (NWRS) pursuant to the National Wildlife Refuge System Administration Act (16 U.S.C. 668dd et seq.). For properties and easements included in the NWRS, the FWS has the full authority to enforce the terms and conditions of the conservation easement. In cases where State conservation agencies are named as easement managers, the State agency is given the right to enforce all the terms and conditions of the easement.

There is a difference between the FWS and a State agency being named as the easement manager. When a State agency is the easement manager, USDA still retains the responsibility for ensuring that all rights and interests of the

United States are protected. However, when FWS is the easement manager, it does not require any oversight by USDA since FWS is also an agent of the Federal Government.

Question. Does USDA incur any additional expenses from allowing these easements? If so, how much, and where is it reflected in the budget justification?

Answer. In disposing of inventory properties containing conservation easements, the Agency does incur some additional expense, primarily in securing surveys of the easement areas. For example, in FY 1994 the Agency spent \$822,122.50 on 842 surveys, and in FY 1995 to date it has spent approximately \$115,494.59 on 89 surveys. Management costs such as fencing an easement area or restoring wetlands are covered by the entity serving as easement manager.

For FY 1996, the Agency requested \$45 million for credit sales. This requested allocation is for credit sale loans and does not cover any management costs of inventory properties. Expenses incurred as a result of conservation easements such as survey costs are covered by Agency contracting funds and not by its regular credit sale allocation. Therefore, it is not reflected in the budget justification for credit sales of inventory property.

Question. What is the current appraised value of the inventory portfolio?

Answer. As of March 21, 1995, the total estimated appraised value of the Agency's inventory property portfolio was \$278,015,426.

Question. What is the current outstanding balance of the loans against these properties?

Answer. For the properties which are currently in inventory, there is no outstanding loan balance. However, the Agency currently has an outstanding credit sale loan balance of \$129,916,823 for inventory properties which have been sold.

CROP INSURANCE

Question. My office, and I am sure other Members here, have received complaints that the necessary materials for private insurers to sell crop insurance for the 1995 crop year were not provided in a timely manner. It is my understanding that extensions were allowed for some producers to purchase crop insurance. Could you provide us with a current status report?

Answer. The Federal Crop Insurance Reform Act of 1994 (Act) was enacted into law on October 13, 1994. This date was actually after the initial 1995 sales closing dates for several insured crops. FCIC worked very hard to complete the required regulations and procedures to implement the many changes mandated by the Act. This included the development and legal clearance of a catastrophic risk protection endorsement which amends any

existing crop insurance policies for the purpose of obtaining catastrophic risk protection. Additionally, FCIC was required to develop and obtain legal clearance on general administrative regulations that provided the basis for implementing provisions of the Act that affected additional levels of insurance coverage. These regulations were published as an interim rule in the Federal Register on January 6, 1995. The catastrophic risk protection endorsement and general administrative regulations were distributed to all reinsured companies and CFSA State and county offices the second week of January 1995.

CFSA completed and distributed in January 1995 a catastrophic risk protection handbook with the above regulations. This handbook provided detailed procedures for the implementation and administration of the catastrophic level of coverage including procedures for establishing the producer's actual production history yields in accordance with the Act. A service office handbook, designed specifically for the CFSA county offices, was developed and issued for use in delivering catastrophic insurance coverage.

FCIC worked diligently to establish initial signup deadlines to provide the maximum opportunity for producers to obtain catastrophic coverage required by the Act to maintain eligibility for certain other USDA farm programs while remaining within the mandates of the Act. Working with legal counsel, FCIC has established a policy for accepting late applications for catastrophic coverage throughout the signup period for farmers who have not suffered early-year crop losses.

CFSA is in the process of reviewing regulations, including all those affecting the crop insurance program. Unnecessary regulations will be eliminated. In the case of FCIC, the majority of the regulations are the insurance policies themselves as well as their associated rules of implementation. The bulk of these regulations differ from those generally being discussed today in that they do not tell a private citizen how to use his or her own property. Rather, they specify how the benefits of a Federal government program are to be distributed. They exist for two principal purposes--first, to assure that producers who deserve benefits receive those benefits, and second, to prevent the occurrence of fraud and abuse, whether by agricultural producers or reinsured companies.

Question. Are there instances where producers have not been allowed to enroll in existing farm programs because they did not purchase crop insurance?

Answer. We have not received any formal communication from the county offices indicating that producers have not been allowed to enroll in a farm program because of failure to obtain at least the catastrophic level of coverage for insurable crops. CFSA placed special emphasis through its public information program to ensure producers applied for crop insurance before the sales closing date. Procedures were implemented to allow producers to sign up late if crops are undamaged and need the insurance for linkage. These actions should preclude a producer from not being able to get insurance and thereby preserve their ability to participate in farm programs.

Question. Currently, producers of crops that do not have specific insurance plans for their crop must rely on an "area yield trigger" to be met before they are eligible for payment. You mention in your testimony that there is currently crop insurance coverage for 150 crops. In Mississippi, producers are particularly interested in coverage for blueberries, pecans, and watermelons. Much attention has fallen lately on the vegetable crops in California. Are these crops eligible for coverage? Would you please provide a list of the crops covered for the record?

Answer. CFSA has implemented a pilot program for blueberries for the 1995 and 1996 crop years. The pilot program includes eight Mississippi counties: Covington, Forrest, Jones, Lamar, Pearl River, Simpson, Smith, and Wayne. These eight counties comprise the major blueberry producing areas of Mississippi.

Currently, crop insurance is offered on 62 different crops. The following list counts individual crop policies. This list does not distinguish between varieties of grapes, types of citrus trees, or types of tobacco because these varieties and types are insured under the single respective parent crop policy. Protection for pecans, watermelons, and any vegetable crop for which there is not crop insurance available, is provided under the Noninsured Assistance Program (NAP).

62* Individual Crops Insured by CFSA

Almonds	Figs	Potatoes
Apples	Flax	Raisins
Barley	Forage	Rice
Blueberries*	Forage Seed	Rye
Dry Beans	Fresh Plums	Safflower
Green Beans for Canola*	Fresh Market Sweet	Soybeans
Corn	Green Peas	Sugar Beets
Cotton	Grapes	Sugarcane
Cranberries	Grain Sorghum	Sunflowers
Citrus Tree	Hybrid Seed Corn	Hybrid Grain Sorghum
Citrus	Macadamia Nuts	Seed
• Grapefruit	Macadamia Trees	Stonefruit
• Lemons	Nursery	• California Apricots
• Mandarins	Oats	• California Nectarines
• Murcotts	Onions	• California Peaches
• Oranges	Popcorn	Sweet Corn for Canning
• Tangelos	Peaches	Table Grapes
• Tangerines	Pears	Tomatoes
Dry Peas	Peppers	Tobacco
ELS Cotton	Peanuts	Wheat
	Prunes	Walnuts

* Blueberries and Canola are insured under two year pilot programs

Question. It is my understanding that the Secretary has the discretion to determine which county offices will sell the catastrophic insurance, and that currently, all county offices offer these policies. Has CFSA received any funds transferred from the Federal Crop Insurance Corporation Fund to cover any expenses during fiscal year 1995? If so, how much? Under what authority were these funds transferred? Was this subcommittee notified?

Answer. FCIC will pay \$4,715,654 from the FCI Fund in FY 1995 for services performed in relation to startup and developmental costs associated with the Noninsured Assistance Program. All monies paid from the FCIC Fund have been approved by OMB and the Office of General Counsel as related to Section 516 of the Federal Crop Insurance Reform Act of 1994.

Approximately \$900,000 has been incurred by county offices for the costs of postage and related mailing expenses of material that is essential to informing the farmer and crop producer of the changes in the crop insurance program resulting from the Federal Crop Insurance Act of 1994. The FCIC Fund will pay the CFSA county offices for these expenses.

The final text of the Federal Crop Insurance Reform legislation provided for the payment from the insurance fund for research and development under section 516(b)(2)(C) of the Federal Crop Insurance Act, as amended. Payments may cover, among other things, program-related research and development, start-up costs for implementing this legislation such as studies, pilot projects, data processing improvements, public outreach, and related tasks and functions. The payment of expenses from the FCIC Fund are not transfers, but an authority for payment and therefore do not normally involve the notification of congressional committees or subcommittees.

Question. Did the Department undergo any costs analysis before deciding to offer catastrophic coverage at all county offices? Do you intend to do so for 1996?

Answer. A cost analysis was completed by CFSA to estimate the cost of implementing the Federal Crop Insurance Act of 1994 which includes not only catastrophic coverage but also requires the administration of a Noninsured Assistance Program. The cost analysis provided estimates for both FY 1995 and FY 1996 and assumed that costs associated with selling catastrophic insurance policies through CFSA county offices would be offset by the nominal fee charged to the producer. Although the Noninsured Assistance Program is intended to offset the need for ad hoc disaster legislation, it does require up-front work before a loss occurs. The need to enhance automated systems in support of crop insurance reform would be necessary for both catastrophic protection and the Noninsured program. Some of the training, such as collection of crop acreage information and determination of actual production history, would also be necessary for both catastrophic protection and the Noninsured program. Additionally, even if no catastrophic insurance were sold by county offices, USDA would still incur costs because CFSA county

offices provide support and extensive information to reinsured companies in the selling and servicing of their policies.

Question. What was the cost to train and equip the Farm Service Centers for delivery of the catastrophic coverage?

Answer. Specific start-up costs such as training and producer mailings are estimated at \$3.8 million at the county office level. Our cost estimates will be updated in June, after receipt of CFSA county office workload and expenditure reporting information. To date, CFSA costs for crop insurance reform have included costs associated with 3-4 day intensive national training of CFSA State trainers and all CFSA non-federal county employees, travel associated with training; and development of policy and handbook material, including printing, distribution and mailing. Additionally, there has been significant workload and staffing costs associated with the implementation and delivery of this new program that affects nearly all CFSA program participants. These include, but are not limited to, handling the initial sign-up, following specific crop provisions, understanding CFSA and producer responsibilities, computing yield histories, and taking acreage reports.

Question. What is the current cost to deliver the catastrophic coverage at all county offices?

Answer. Our estimated FY 1995 county office costs for implementation of Federal Crop Insurance Reform is \$66.2 million and 1,690 staff years. Of this amount \$45.2 million is for catastrophic coverage.

Question. How much would CFSA save if it withdrew from delivery of catastrophic protection at the county offices?

Answer. It is anticipated that costs associated with selling Catastrophic insurance policies through CFSA county offices will be covered by the nominal fee charged to the producer. Therefore, no net savings to CFSA would be realized by withdrawing delivery of catastrophic coverage. However, the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 provided additional requirements on the Consolidated Farm Service Agency above and beyond the selling of catastrophic risk insurance. A major component of the Crop Reform legislation requires the administration of a Noninsured Assistance Program for uninsurable crops. Although this portion of the legislation offsets the need for ad hoc disaster legislation, the Noninsured Assistance Program requires up-front work before a loss occurs. The need for enhancement of automated systems in support of crop insurance reform is necessary for both catastrophic protection and the Noninsured program. Some of the training, such as collection of crop acreage information and determination of actual production history, is necessary for both catastrophic protection and Noninsured program. In addition, even if all catastrophic insurance were sold by reinsured companies, USDA would still incur costs because CFSA county offices provide support and extensive information to reinsured companies in the selling and servicing of their policies. These

activities include cropping history data, aerial photocopies of farm operations and program compliance information.

Question. The fiscal year 1996 budget request includes an additional \$14.8 million for costs associated with the additional delivery of the catastrophic coverage by county offices. I would anticipate that this committee will be forced to hold programs at or below a freeze at the fiscal year 1995 level. If the committee were unable to provide this increase, what alternatives would you consider?

Answer. The additional \$14,795,000 is not for CFSA county office program delivery expenses associated with catastrophic risk insurance. These costs will be covered by the CAT producer service fee in 1996. Rather, our budget request is for workload associated with the administration of NAP which is not entirely dependent upon an actual disaster occurring. NAP requires up-front collection of crop acreage information and determination of actual production history before applications for loss assistance are taken. The increased appropriation is also needed to fund CFSA for the support services provided to reinsured companies in the selling and servicing of their catastrophic and buy-up insurance policies. It is anticipated that the volume of information and services provided to reinsured companies by CFSA county offices will approximately double from current levels as insurance coverage expands.

REGULATORY REFORM

Question. The Congress and the Administration have both undertaken an effort to review the regulations of all federal agencies to ease the burden, and when possible, eliminate unnecessary or overburdensome regulations. In earlier testimony before this subcommittee, representatives from USDA have said that there is an effort underway to review USDA's regulations. However, the American Association of Crop Insurers has testified before the House Agriculture Appropriations Subcommittee that the implementation regulations and procedures for the reformed crop insurance program are "more complex" and carry "more administrative cost" than the old program.

Mr. Ackerman, how do you respond to this?

Answer. The Department of Agriculture and CFSA are in the process of reviewing regulations, including all those affecting the crop insurance program. Unnecessary regulations will be eliminated. In the case of FCIC, the majority of the regulations are the insurance policies themselves as well as their associated rules of implementation.

The new catastrophic--or CAT--insurance program is not more complex than the old program--under which only the so-called "buy-up" levels of coverage were available--but it is slightly different. For example, certain optional features that are available on "buy-up," such as optional units, are not available on CAT. These differences exist in order to simplify the CAT product.

Selling both CAT and "buy-up" coverages while managing the change-over from the old to the new program is unavoidably more complex than selling only the old program and not having to change over. This is essentially a transitional issue.

The bulk of FCIC's regulations differ from those generally being discussed today in that they do not tell a private citizen how to use his or her own property. Rather, they specify how the benefits of a Federal Government program are to be distributed. They exist for two principal purposes--first, to assure that producers who deserve benefits received those benefits, and second, to prevent the occurrence of fraud and abuse, whether by agricultural producers or reinsured companies.

During 1994, FCIC participated in an extensive series of meetings with reinsured companies and their representatives. Many suggestions for simplification of the program were presented and analyzed. Those that were judged by both FCIC and the companies as being workable will be implemented.

CFSA has recently written to all reinsured companies and invited them and any other interested party to submit suggestions for further simplifying the delivery to the crop insurance program. The Department of Agriculture and CFSA are committed to implement every workable suggestion as long as there is not a negative side effect, such as an increase in the program's expected loss ratio.

Question. Mr. Buntrock, are there other areas within the Consolidated Farm Service Agency that you are looking at?

Answer. The Consolidated Farm Service Agency is currently undertaking a comprehensive review of the Agency's regulatory performance measures for the Washington, D.C., Headquarters, field, and State offices, to determine where changes are needed. Based on the findings from the comprehensive review, CFSA will make any necessary revisions to ensure all standards place emphasis for performance measures on results, not process.

CFSA has farmer elected committees representing every agricultural county in the Nation. These men and women are very much aware of our program regulations and how these regulations affect producers. In most cases, they are leaders in their local farm communities and are quite active in commodity groups. This gives them an excellent reading on the overall farm community's thoughts in this area. We propose to use these committees along with our appointed State CFSA committees to obtain ongoing input on needed changes in our existing regulations and procedures. This has previously been done by inclusion of county and State committee members on task forces or study groups that were developing regulations for new or revised programs, including the study group which last year provided recommendations for changes in the regulations for streamlining or simplifying the paperwork which individual producers face when participating in CFSA programs.

Question. Will the new regulations that are a result of the 1995 Farm Bill be promulgated with simplicity in mind?

Answer. Yes. We have every intention to use the process established to review existing regulations for promulgating new ones. In particular, the process of including county and State committee members on task forces to develop new regulations has proven to be a valuable input in the final development of more simplified, customer-friendly regulations and procedures.

CONSERVATION RESERVE PROGRAM

Question. Secretary Moos, in your prepared testimony, you state that the Secretary has exercised his authority to allow landowners to modify and extend their Conservation Reserve Program (CRP) contracts. Subsequently, the budget reflects the expectation that the reevaluation of current CRP rental rates and modification of acreage under contract will encourage extension of contracts. When will the regulations to implement these changes be implemented?

Answer. Regulations to implement provisions announced by Secretary Espy on December 14, 1994, including general provisions to modify and extend CRP contracts as they expire beginning in 1996 and to reevaluate current rental rates, are expected to be published in the summer of 1995. As provided in the press announcement, the regulations will be published as a proposed rule for public comment. Once comments are reviewed and applicable policy decisions made, the final rule will be promulgated, probably in fall 1995.

Question. Do you anticipate that CRP rental rates will increase? Will you please provide the Committee with the expectation of cost increases for FY 1996?

Answer. At this point, it is unclear whether, on average, actual CRP rental payment rates will be above or below current payment levels. What is clear, however, is that procedures similar to those utilized in CRP signups 10 through 12 will also be utilized in future CRP actions to assure that rents paid to successful contract bidders will not exceed the prevailing local rental rate for comparable land. Thus, some rental payment rates for contract extensions will be lower than current payment rates and some will be higher, but none will exceed the amount USDA believes will be the fair market value. Averages of actual payment rates will reflect several factors. First, in many instances, actual market rental rates have increased since the majority of the CRP acreage was enrolled from 1986 through 1990. In addition, as a result of the NAFTA and GATT agreements and other market factors, agricultural commodity prices and returns are expected to be better than those experienced during the earlier enrollment period. Many potential CRP bidders are likely to consider these in rents and future expectations in their bid determination. To be fair, USDA will also have to recognize these conditions when determining maximum bid caps. Second, average payment rates will also reflect the types and locations of acreage selected for contract extensions or new contracts. These selections will, in turn, be determined by the eligibility and selection criteria for the

announced CRP actions that are presently under development by USDA. If criteria are developed that result in the selection of acreage from areas with relatively low local rental rates, then overall average payment rates may fall. If the criteria result in enrollment or re-enrollment of acreage from high rent areas, then average payment rates will increase.

The 1996 President's Budget includes average payment rates that are slightly above current levels. The average rental payment rate for re-enrolled acreage in contract extensions is \$55 per acre, compared with \$50 per acre for existing contracts. The average payment rate for new contract acreage is estimated to be \$65 per acre, compared with \$63 for acreage enrolled in signup 12. The average rental rate was \$54 per acre for signup 10 and \$59 per acre for signup 11. Budget estimates of rental payment rates for both re-enrollments and new enrollments are based on updated rental market information, higher commodity price expectations, and the eligibility and selection criteria and processes utilized in CRP signups 10 through 12.

To the extent that the assumed market conditions, price expectations, and acreage eligibility and bid selection criteria and procedures differ from those in place when new enrollments or extensions occur, the actual payment rates will differ from those included in the President's Budget.

Question. Mr. Buntrock, you mention in your statement that new CRP enrollments will be targeted to more environmentally sensitive acres. In testimony before this subcommittee last year on the Wetlands Reserve Program, Mr. Buntrock stated that "land that may not have quite the same market value, or even lesser value, may have considerably higher environmental benefits." Would this premise be true for land enrolled in the Conservation Reserve Program? Does this mean that as more acres are retired from the program and only those that are more environmentally valuable are enrolled or allowed to re-enroll, that the cost of the CRP will decrease? Are these savings reflected in the budget?

Answer. Based on the assumption that the Environmental Benefits Index that was used in the 12th CRP signup is continued, CRP rental rates are expected to increase from \$63 per acre in the 12th signup to \$65 per acre for acres enrolled in FY 1996.

It is difficult to quantify environmental benefits. The measurement is very dependent upon the value society places on those benefits and the methodology used to measure relative benefits. The EBI used for the 12th CRP signup placed special emphasis on water quality benefits. This emphasis shifted resources into the Midwest and Eastern United States with corresponding higher rates. If water quality continues to be a special emphasis and the methodology to measure benefits remains the same, we believe that the cost of the program may continue to increase.

In the Wetlands Reserve Program, approximately 8 acres were bid for every acre accepted. The high interest in the program provided the opportunity to enroll in WRP the lowest cost acres having high environmental benefits.

Given that the CRP is a mature program and in view of the payment rates used in the 12th signup, it is unlikely that CRP will have the luxury of a similar high demand.

Question. Mr. Buntrock, you also mention in your statement that lump-sum easement payments will be made for the first time to complement the CRP program. The budget includes \$5 million for this. What is the per acre cost of the easement program versus the per acre cost of the annual rental payments of the current program?

Answer. Section 1437(c)(2) of the Food, Agriculture, Conservation, and Trade Act of 1990 authorizes the Secretary of Agriculture to extend expiring Conservation Reserve Program (CRP) contracts through long-term or permanent easements. Only permanent easements are eligible for lump-sum payments. In conducting the analysis for preparation of the 1996 President's Budget, it was assumed that the purchase price for the average CRP easement acre would be \$575, an amount roughly equivalent to the value of the average acre of U.S. farmland in 1994. Additional Federal costs associated with the purchase of the easement, such as cover costs, technical assistance costs, and appraisal, legal, and other transactions costs are expected to average approximately \$113 per acre. Thus, the total average Federal per-acre cost for a permanent CRP easement is expected to be approximately \$688.

The Federal cost associated with an average CRP acre over a ten-year contract period will vary, depending on whether the acre is included in an contract extension or included in a contract for new enrollment. For contract extensions, the ten-year rental cost of the average acre is expected to be about \$550. Most extended contracts are not expected to require additional cost-share assistance for cover establishment or technical assistance. Thus, the average Federal cost for an acre included in a ten-year contract extension should be about \$550 per acre, the same as the estimated rental cost.

Rental payments for newly enrolled CRP contract lands are expected to average about \$650 per acre. Cost-share assistance for cover establishment is estimated to be approximately \$33 per acre, unchanged from the signup 10 through 12 estimates. Technical assistance costs are estimated at \$12 per acre, but are subject to change depending on the terms of an updated CRP technical assistance reimbursable agreement with NRCS that is yet to be negotiated. Based upon these current assumptions, the total average per-acre Federal cost for newly enrolled CRP acres is estimated to be \$695 per acre.

FARM OPERATING AND OWNERSHIP LOANS

Question. It is my understanding that in many parts of the country there will be, or currently is, a shortage of loanable funds in the direct farm ownership, direct and guaranteed operating, and subsidized guaranteed operating accounts. Ms. Kling, will you give us a current situation report?

Answer. The following States have exhausted their funds for fiscal year 1995.

STATES OUT OF FUNDS:

DIRECT OPERATING (Non-beginning farmer)

Alabama	Maine	Oklahoma
Alaska	Massachusetts	Oregon
Arizona	Michigan	Pennsylvania
Colorado	Minnesota	Rhode Island
Connecticut	Mississippi	South Carolina
Idaho	Missouri	South Dakota
Iowa	Montana	Tennessee
Kansas	Nebraska	Virginia
Kentucky	New Mexico	Wisconsin
Louisiana	New York	

GUARANTEED OPERATING WITH INTEREST ASSISTANCE
(Non-beginning farmer)

Illinois	Montana	North Dakota
Iowa	Nebraska	Oklahoma
Kansas	New Jersey	South Dakota
Michigan	New Mexico	West Virginia
Minnesota	New York	Wisconsin

GUARANTEED FARM OWNERSHIP (Non-beginning farmer)

Alabama	Mississippi	South Carolina
Colorado	New Mexico	South Dakota
Georgia	New York	Wisconsin
Louisiana	North Carolina	Wyoming
Michigan	Oklahoma	

Question. It is my understanding that States currently have access to the total allocations for FY 1995. Would spacing these allocations out over the fiscal year prevent this situation from occurring?

Answer. The Agency releases one-half of the annual allocation during the first quarter of the fiscal year and the balance in the second quarter. The intent of this action is to provide States with all available loan funds during the seasonal portion of the year when the funds are needed. For example, direct operating loan funds are needed to assist family farmers to plant their crops in March, not August. Stretching out allocations of loan funds throughout the fiscal year would hinder the efforts of beginning family farmers to become successful operators.

Question. Will the funds requested for FY 1996 prevent a similar situation this time next year? What else can be done to prevent this situation from occurring again?

Answer. As long as the demand for subsidized direct loans exceeds the amount of funding that can be budgeted for these loans, this situation is likely to continue.

Question. Will you please provide for the record the recalculated program level for these programs, the status of available funds in the States and the estimated number and dollar amount of applications that you know will carry over from FY 1995 to FY 1996?

Answer.

Farm Operating and Ownership Loans

<u>Program</u>	<u>Allocation</u>	<u>Remaining Loan Balances</u>
Direct Operating	\$450,000,000	\$109,000,000
Guaranteed Operating-Regular	1,891,000,000	1,309,000,000
Guaranteed Operating-Subsidized	236,000,000	131,000,000
Direct Farm Ownership	50,000,000	15,000,000
Guaranteed Farm Ownership	562,000,000	259,000,000

The number of direct operating and farm ownership applications on hand September 30, 1995, will exceed the 3,138 direct operating and 2,245 direct farm ownership applications on hand at the end of FY 1994.

OPTIONS PILOT PROGRAM

Question. USDA recently announced that it would continue the Options Pilot Program in 1995 and selected counties in Nebraska and Ohio to add to the participating areas. This program encourages producers to use options contracts for income and price support. Producers that participate are guaranteed that their protection will be equivalent to established target price and loan levels for commodities they produce. Mr. Buntrock, are producers of cotton and rice currently eligible to participate in this program?

Answer. Producers of cotton and rice are not currently eligible to participate in the Options Pilot Program.

Question. Why has USDA chosen to implement this program for only wheat, corn, and soybeans?

Answer. Subtitle E of the 1990 Farm Act, the legislation which establishes the Options Pilot Program, limits eligibility to the 1991-1995 crops of corn and the 1993-1995 crops of wheat and soybeans. The Secretary has authority to add additional States and counties which are significant producers of corn, wheat, or soybeans, but has no authority to add additional crops.

Question. What is the current cost of this program?

Answer. The cost of the Options Pilot Program is measured as the difference between outlays to cover premium payments and incentive payments to participating producers compared to what deficiency payments would have been paid to those producers under the regular program. In the most recent year for which data exists (1994), outlays were \$1.8 million less for corn and \$1.9 million more for wheat, for a total cost of \$121,278 more than would have been the case under deficiency payments. These figures include \$1.2 million in incentive payments. Total cost of the Options Pilot Program in 1993 was \$5.0 million above what would have been the case if deficiency payments had been paid to participants instead of reimbursing participants for premiums and incentive payments.

Question. If this program were implemented for cotton and rice producers, what limits would be placed on options premium payments?

Answer. Implementation for cotton and rice producers would require a change in legislation. We would expect the same type of limits to be placed on cotton and rice options premium payments as are currently placed on wheat and corn options premium payments. Pilot program participants are required to comply with the same acreage limitations and other requirements as the acreage reduction program participants. Participants must agree that the sum of the premium subsidy on the purchase of loan rate puts, loan deficiency payments, and marketing loan gains cannot exceed \$75,000. The incentive payment is not subject to the payment limit. A participant may enroll up to 50,000 bushels of corn and up to 15,000 bushels each of wheat and soybeans in the pilot program. Each put option purchased is in 5,000 bushel increments. It would be necessary to calculate a strike price equivalent to the target price plus the average basis between the eligible counties and the location of the primary futures market for the crop.

Question. What would the incentive payment be to producers that participate?

Answer. The legislation permits an incentive payment of up to \$0.15 per bushel. The incentive payment for corn, wheat, and soybeans for the 1994 and 1995 Options Pilot Programs was \$0.05 per bushel. We would expect that the incentive payment for cotton and rice, if permitted, would be equivalent to that offered for existing crops.

QUESTIONS SUBMITTED BY SENATOR BURNS

CROP INSURANCE REFORM

Question. With the recent realignment on the field offices for the Consolidated Farm Service Agency, could you provide me with a comparison of the staffing reductions within the headquarters here in Washington, and that of the field offices? I would appreciate this information for all the agencies under your authority.

Answer. The attached table provides the requested information.

Comparison of FTE Staffing Reductions
Farm and Foreign Agricultural Services

AGENCY	1993	1994	1995	1996	1997	1998	1999	1993 vs. 1999	Percent
Consolidated Farm Service Agency									
FEDERAL FTE'S: Washington, D.C.	12,119	11,199	11,131	10,113	9,999	9,882	9,299	-2,900	-23.8%
Field	7,148	6,639	6,342	6,462	6,336	6,275	6,126	-1,022	-14.3%
Total Federal	8,367	7,838	7,473	7,475	7,335	7,257	7,055	-1,312	-15.7%
NON-FEDERAL FTE'S: CFSA County Offices (ongoing programs)	13,726	12,797	12,560	12,560	12,560	12,560	12,560	-1,166	-8.5%
Foreign Agricultural Service									
FEDERAL FTE'S: Washington, D.C.	650	658	645	645	629	606	573	-77	-11.8%
Field	274	263	263	278	263	263	263	-11	-4.0%
Total Federal	924	921	908	923	892	869	836	-88	-9.5%

Question. I have received numerous comments from my State that the producers still are unaware of the programs and the mix of the new coverage being offered under the new crop insurance program. With this in mind, I have been asked for the reasoning behind the earlier date for program sign-up. Could you provide an answer to the date changes for program sign-up?

Answer. The Federal Crop Insurance Reform Act, or the Act, of 1994 required the Federal Crop Insurance Corporation, or FCIC, to establish 1995 sales closing dates for spring planted crops 30 days earlier than the corresponding sales closing dates for the 1994 crop year. This requirement was a result of the mandate for FCIC to meet certain program performance initiatives. The Omnibus Budget Reconciliation Act of 1994 required FCIC to achieve an overall loss ratio of 1.10 by October 1995. The Act further refined this requirement to be an overall projected loss ratio of not greater than 1.075 on and after October 1, 1998.

The basic premise for moving the sales closing dates for spring crops was derived from a report by the General Accounting Office that recommended adverse selection by the producer against the crop insurance program could be mitigated by establishing earlier spring sales closing dates. The earlier dates would greatly reduce the ability of the producer to predict the likelihood of a crop loss with increased knowledge of weather conditions such as rainfall, planting conditions, ground temperature, or subsoil moisture, prior to purchasing crop insurance. FCIC generally agrees that the later the sales closing date, the better the producer can use information to speculate the overall success of the crop for the year.

With the late passage of the Act on October 13, 1994, being well into the 1995 crop year, FCIC recognized the earlier sales closing dates would create difficulties for disseminating information and assuring producer awareness of program requirements availability. To afford producers maximum opportunity to meet program requirements under the Act, and to learn of their insurance options, FCIC issued procedures for accepting late-filed crop insurance applications for catastrophic coverage only. Producers may submit applications until April 28, 1995, the same sign-up date as for price support programs.

FCIC anticipates that these procedures will permit producers to obtain all program benefits to which they are entitled.

Question. How has the change in the program affected the rates of those areas with a history of high enrollment? Overall what figures can you provide at this date about the enrollment?

Answer. Crop insurance participation rates are expected to more than double for 1995 from around 800,000 policies to nearly 1,700,000 policies. Because of the increased level of premium subsidy, increases are expected nationwide, even in areas where participation has historically been high.

Although actual participation figures will not be available until late summer, a national survey will be performed in May by the National Agricultural Statistics Service. They expect to have participation estimates prepared by late June.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

REORGANIZATION

Question. Can you provide your assessment of how smoothly the consolidation effort is proceeding at the State and county level of former FmHA and ASCS offices?

Answer. State Directors of the former FmHA and State Executive Directors of the former ASCS worked together to develop individual State plans for moving the former FmHA farm credit programs to CFSA. These basic plans have been approved and the two State Directors are developing specifics for implementing these plans. Given the differences in computer equipment and other facets of the two agencies, the actual transfer of the program has several complicated issues. Overall, however, the consolidation is moving smoothly and we are confident that we will be able to begin to provide one-stop service to our farmer clients in time for the next operating season.

Question. Do you intend to make the effective date of transfer of these functions the same for former FmHA and ASCS personnel? What will be the effect on these employees if there is not a single transfer effective date?

Answer. The effective date of transfer of the former FmHA employees to the CFSA at the State and county level will likely be October 1, 1995, subject to ongoing discussions with the appropriate RECD unions. Former ASCS State and county personnel will be operationally transferred to CFSA prior to October 1, but this is expected to have no effect on employees as we continue the consolidation effort.

QUESTIONS SUBMITTED BY SENATOR HARKIN

REORGANIZATION

Question. I understand that there is a problem-solving session between RECD and FFAS labor and management scheduled for next month to try to resolve issues regarding the transfer of FmHA functions and employees to the RECD and the CFSA. What specific problems, if any, do you have with the proposals which were submitted by local unions of the former FmHA, and what do you believe are the prospects for consensus solutions to these issues in this meeting?

Answer. There is a meeting scheduled for April 6-7, 1995 at which the issues will be thoroughly discussed to try to resolve issues regarding the

transfer of FmHA functions and employees to the RECD and CFSA. It is my understanding that the principle issue is placement of employees. We have committed to placing all employees in the Farm and Foreign Agricultural Services mission area, including former employees of the FmHA, in positions at the same grade and pay level. The purpose of this meeting is to reach consensus on this and other issues of concern to the employees and their union representatives. We are committed to working with the unions to reach such a consensus so that the reorganization can proceed expeditiously.

Question. How and when will CFSA communicate to former FmHA employees who currently support the farm credit functions of the agency the number, types and grades of positions which CFSA plans to establish for these functions, and the locations of the offices in which these employees will be expected to work?

How much lead time will former FmHA employees and their families have in deciding whether to transfer as their functions are transferred?

Answer. Former FmHA employees are currently reporting to the Under Secretary for Rural Economic and Community Development (RECD). RECD will inform both former FmHA employees and CFSA management as to the exact employees and the number, types and grades of farm credit employees which RECD will transfer to CFSA. RECD expects to identify the number, types and grades of Headquarters positions by the end of March 1995, and also expects to identify the specific Headquarters employees who will transfer by the end of June 1995. In regard to former FmHA employees in the field, RECD expects by the end of August 1995 to identify the employees and the types, grades, and locations to which employees will transfer. CFSA and RECD expect that the formal transfer will occur on or about October 1, 1995.

Question. How does CFSA plan to meet the transferred farm credit program automation, accounting, training and other administrative support requirements for the long term?

What are your estimates of the numbers, types, grades and physical location of CFSA in-house staff and contractor staff costs for the next five fiscal years?

Answer. The deployment of farm credit personnel into the CFSA has been the focus of ongoing discussions in USDA. The Assistant Secretary for Administration with the Under Secretary for Farm and Foreign Agricultural Service and the Under Secretary for Rural Economics and Community Development have maintained open communications with both management officials and employee representatives from the affected organizations.

Outreach efforts have included the establishment of a Labor Policy Group to discuss and resolve issues of mutual interest. These endeavors have resulted in two memorandums of understanding that create processes through which issues identified by the respective parties can be effectively handled.

Because discussions concerning who will transfer to the CFSA are still underway with union representatives of the former FmHA, it is not possible at this time to provide the specific number, types, and grades of employees at the requested physical location.

However, the numbers of CFSA Federal employees may be depicted in terms of full-time equivalent (FTE). The following table includes all FTE's from components of the former ASCS, FmHA, FCIC and FAS which comprise the CFSA at the locations you requested. It excludes 13,765 non-Federal county office FTE's from the former ASCS at locations nationwide.

LOCATION	FY 1996 FTE
Washington, D.C.	1,152
Kansas City (MO and KS)	1,534
St. Louis, MO	186
Salt Lake City, UT.	93
States	4,176 a/
Regions	334
TOTAL	7,475

a/ Includes 3,154 farm loan State and county level FTE's.

Total salaries and benefits (excluding all other cost categories such as rent, travel, etc.) associated with the 7,475 Federal FTE's are approximately \$369.9 million, reflecting funding of \$342.2 million from direct appropriations and \$27.7 million in reimbursements for services provided.

For FY 1997 through FY 2000, we are anticipating some reductions in staff consistent with NPR streamlining plans but have not made any specific decisions concerning the location of those reductions.

The CFSA salaries and expenses request for the FY 1996 budget includes \$8.876 million for relocation and office consolidation, primarily for farm credit staff in the field.

Question. How does CFSA plan to handle the loan approval and supervised credit authorities in the field after the former FmHA farm credit functions are transferred to CFSA?

What are your estimates of the numbers, types, grades and physical location of CFSA Federal employee staff and non-Federal employee staff for the next five fiscal years?

Answer. It is anticipated that the former FmHA Farm Credit Programs at the field level will officially transfer to CFSA on October 1, 1995. RECD is

currently in the process of identifying former FmHA field staff who are actively involved in the farm credit programs. These individuals will transfer with the credit program and will have primary responsibility for loan approval and supervised credit authorities until we can provide necessary training to other CFSA staff. Our long-term vision, however, is that every CFSA office will be able to deliver all CFSA programs, including the credit programs. Loan approval and servicing authorities, however, will only be provided to staff who have received appropriate training and are qualified to carry out this important responsibility.

In terms of FTE's, approximately 20 percent of the 3,154 FTE's projected for farm credit activities in State and county offices in FY 1996 will be located in the States and 80 percent will be located in USDA Service Centers which house CFSA county offices. No reductions in these staff are anticipated for FY 1997-2000 at this time. However, staffing levels in these years will be dependent upon projected program budget levels and administrative expenses appropriations.

Question. What plans does CFSA have for coordinating farm credit loan activities with RECD's rural development grant and loan programs to promote local efforts to add value to and better market farm products, for example through cooperatives or similar organizations?

Answer. CFSA is committed to supporting farmers and ranchers who are interested and who would benefit from a cooperative arrangement. As part of its involvement in the sustainable agricultural initiative, CFSA is developing mechanisms whereby its farm lending programs can be combined with the programs and expertise of other Federal, State, local, and private organizations to increase the overall economic impact on communities. The Rural Business and Cooperative Development Service within USDA is a primary partner, as CFSA coordinates its lending with cooperatively organized farm business.

CFSA also administers the "Small Farmer Outreach Training and Technical Assistance Program," i.e., "Outreach and Assistance Grants for Socially Disadvantaged Farmers and Ranchers." The purpose of the program is to enhance the ability of the small, socially and economically disadvantaged farmer and rancher to operate a farming enterprise independently and produce income adequate to service debts, maintain farm operations and provide a reasonable standard of living.

Grant recipients are composed of 1890 land grant institutions, Native American community colleges, Hispanic servicing institutions, and community based organizations. These entities have made a profound impact on rural America by introducing techniques that have greatly enhanced the participants' farm management skills, farm productivity and increased marketing viability. As a result of the outreach initiatives, farmers and ranchers are assisted in applying for loans available to them from CFSA.

Question. It is my understanding that OMB has requested agencies to maintain current information on the number of service contracts awarded, FTE

impacts and related dollar savings. Could you provide for the record all service contracts which are currently in effect or planned for CFSA, the purpose or type of service to be performed, the date of award or projected date of award, the actual or estimated dollar cost, the number of contractor staff years involved, and whether or not a cost comparison was made by the CFSA comparing the cost of contracting for those services versus the cost of in-house performance?

Answer. I am providing tables related to farm credit programs which reflect the total number of actual contractual and non-contractual services obligated for FY 1994 and FY 1995 (as of February 10, 1995). The Agency was provided an allocation in the amount of \$78,975,000 for FY 1995 to cover contractual and non-contractual services. In FY 1995, \$3.45 million was reduced from the non-recoverable portion of these monies to fund the Supervised Credit Initiative. The Agency was provided an allocation of \$73,251,000 for FY 1994.

The only data available at this time is for those services for which obligations of funds have been established (see attached). Contracts are awarded and non-contractual payments are made on an ongoing basis and are only tracked by the National Office as they are obligated from the current fiscal year's allocation.

In accordance with instructions issued by the Agency to its field offices, appropriate contracting personnel are to perform cost studies prior to awarding contracts to determine if it is in the Government's best financial interest to contract for the service or perform it "in-house."

Of all of the services which are actually contracted for by the Agency, there are only a few which could be performed "in-house" by the Agency. For example, services such as repairs/maintenance, broker services, environmental cleanup, credit reports, and surveys would be very difficult to perform "in-house" as they all require expertise outside of that normally retained by Agency personnel. A few services such as analysis, inspections, and appraisals could be performed by Agency personnel.

For any cost expense procured, there is an estimated overhead (development of request, statement of work, independent Government cost estimate, and contract administration) of approximately 30 percent of the total contract dollars involved.

Service Contract Current or Estimated FY 1995 (Name)	Purpose or Type of Service to be Performed	Date or Projected Date of Award	FY 1995 Actual or Estimated Cost	Number of Contractor Staff Years (If Applicable)	Was A Cost Comparison Made Between Contracting Out and In-House Performance (Yes/No)
54-3151-1-00010	Fax machine maintenance.	9/91	\$39,600.00	1 year	No.
54-3151-1-00002	Training of CFSA personnel in the use of PC software.	1/91	\$70,000.00	1.8 months	No.
53-3151-1-00005	Mainframe software support services.	8/91	4 million	40 years	Yes.
53-3151-2-00007	Warehouse storage space, handling services and moving supplies and services.	8/92	\$70,000.00	4 months	Yes.
53-3151-3-00001	Hardware maintenance of current State and County Office Automation Project (SCOAP) system.	9/92	\$6,000,000.00	10 years	No.
53-3151-3-00006	Daily program operations and technical services for Process Commodity Inventory Management System (PCIMS).	10/93	\$7,000,000.00	25 years	Yes.
53-3151-3-01135	Integrated multipurpose software and related services for the Federal Crop Insurance Corporation (FCIC).	9/93	\$106,000.00	11 months	No.
53-3151-4-00001	Claims processing services in support of GSM-102 and 103 loan programs	9/93	\$600,000.00	7 years	No.
53-3151-4-00002	Identification, verification, and validation of software enhancement effort for PCIMS.	1/94	\$340,000.00	7 years	No.
53-3151-4-00005	Services for the embossing and packaging of Government supplied plastic cards used as Peanut Producer ID and Tobacco Marketing cards.	4/94	\$45,000.00	Less than 3 days per year	No.

Covers all CFSA offices, including former ASCS and former FCIC locations.

Service Contract Current or Estimated FY 1995 (Name)	Purpose or Type of Service to be Performed	Date or Projected Date of Award	FY 1995 Actual or Estimated Cost	Number of Contractor Staff Years (If Applicable)	Was A Cost Comparison Made Between Contracting Out and In-House Performance (Yes/No)
53-3151-5-00001	Analytical support services on personal disparity situ for CFSA.	12/94	\$800,000.00	3 years	No.
53-3151-5-00100	Daily program operations and technical services for Cotton Inventory Management Systems.	12/94	\$13,552,264.00	150 years	Yes.
53-3151-9-00106	Services to automate Aerial Photography Field Office (APFO). Includes all hardware/software and maintenance services.	8/89	\$800,000.00	9 years	No.
53-3151-9-00100	Operations and maintenance of Waverly, NE, hazardous waste cleanup.	10/89	\$140,000.00	3 years	No.
To be determined	Operations and maintenance of Waverly, NE; hazardous waste cleanup.	5/95	\$17,000.00	3 years	No.
To be determined	Integration services to conduct requirement analysis, design and implementation of automated records management of claims system for Kansas City Financial Management Office.	7/95	\$198,700.00	Not Available	No.
53-645S-3-0002	Mechanical maintenance of heating, cooling and other mechanical systems in Kansas City, MO.	12/92	\$169,700.00	2.7 years	No.
53-645S-5-0001	Janitorial Services for Kansas City, MO.	11/94	\$155,940.00	7 years	No.
53-645S-3-0011	Services for scheduled and on-call maintenance of elevators/escalators in Kansas City, Mo.	9/93	\$27,601.00	1.6 years	No.
53-645S-4-0003	Services for the operation of mailroom for CFSA, National Computer Center (NCC) and Office of General Counsel in Kansas City, MO.	2/94	\$354,000.00	12 years	Yes.

Covers all CFSA offices, including former ASCS and former FCIC locations.

Service Contract Current or Estimated FY 1995 (Name)	Purpose or Type of Service to be Performed	Date or Projected Date of Award	FY 1995 Actual or Estimated Cost	Number of Contractor Staff Years (If Applicable)	Was A Cost Comparison Made Between Contracting Out and In-House Performance (Yes/No)
53-645S-3-6032	Services for scheduled and on-call maintenance for Uninterruptible Power Supply and Emergency Power Engineering in Kansas City, MO.	4/93	\$25,000.00	3 years	No.
To be determined	Services for scheduled and on-call maintenance of chilled water system for NCC mainframe computer in Kansas City, MO.	7/95	\$8,000.00	3 months	No.
53-3148-1-2007	Maintenance services for remote sensing.	4/91	\$400,000.00	1.75 years	No.
53-3148-1-2000	Software support services for VAX/VMS DEC computer.	12/91	\$1,000,000.00	1 year	No.
53-3148-3-2001	Data entry for travel services.	10/92	\$70,000.00	8 months	No.
53-3148-4-2000	Client/Server programmer services.	12/93	\$1,000,000.00	1 year	No.
53-3148-3-2007	Messenger, driver and laborer support services.	10/92	\$35,000.00	2 years	No.
53-3148-3-2009	Data subscription for country risk, profiles, rankings, and MACRO economic analysis.	4/93	\$30,000.00	7 months	No.
53-3148-4-2013	Force 2000 diversity (culture) training.	9/94	\$90,000.00	5 years	No.
53-3148-5-2008	Financial Accounting Retirement System maintenanc and enhancement services.	10/94	\$152,000.00	2 years	No.

Covers all CFSA offices, including former ASCS and former FCIC locations.

Service Contract Current or Estimated FY 1995 (Name)	Purpose or Type of Service to be Performed	Date or Projected Date of Award	FY 1995 Actual or Estimated Cost	Number of Contractor Staff Years (If Applicable)	Was A Cost Comparison Made Between Contracting Out and In-House Performance (Yes/No)
53-3148-5-2009	Facilities management, users assistance team, and environment control services.	10/94	\$2,911,761.00	5 years	No.
53-319R-3-005	Word processing systems design and analysis services.	2/93	\$50,000.00	2 years	No.
53-3148-3-2011	Data subscription for on-line export/import informatio	8/93	\$30,480.00	7 months	No.
To be determined	Aerial photo services for Forest Service.	9/95	\$100,000.00	4 months	No.
To be determined	Aerial photo services for NRCS.	4/95	\$40,000.00	1 month	No.
To be determined	Aerial photo services for Bureau of Indian Affairs	7/95	\$12,000.00	1/2 month	No.
To be determined	Aerial photo services for Bureau of Land Manage	7/95	\$12,000.00	1/2 month	No.

Covers all CFSA offices, including former ASCS and former FCIC locations.

Question. What are proposed staff years at the supervisory levels as compared to the numbers of proposed staff years at the non-supervisory levels for CFSA's headquarters and field offices for each of the next five fiscal years?

Answer. The following table provides that information for Federal office employees on an FTE basis.

CONSOLIDATED FARM SERVICE AGENCY

Year	1993	1994	1995	1996	1997	1998	1999	2000
Supervisors								
Headquarters	134	124	103	91	83	74	64	64
Field	937	870	722	642	579	523	448	448
Total:	1,071	994	825	733	662	597	512	512
Nonsupervisors								
Headquarters	1,085	1,075	1,028	922	916	908	865	865
Field	6,211	5,769	5,620	5,820	5,757	5,752	5,678	5,678
All Employees	8,367	7,838	7,473	7,475	7,335	7,257	7,055	7,055
Headquarters	1,219	1,199	1,131	1,013	999	982	929	929
Field	7,148	6,639	6,342	6,462	6,336	6,275	6,126	6,126

QUESTION SUBMITTED BY SENATOR BYRD

AGRICULTURAL CONSERVATION PROGRAM

Question. Mr. Buntrock, the Agricultural Conservation Program (ACP) is a vital program in West Virginia, which is recognized as having the highest soil erosion rates on pastureland in the nation. Compounding traditional conservation and water quality issues, the West Virginia poultry industry is growing at an unprecedented rate, particularly in the Potomac Headwaters area of the State.

Under the Administration's proposed budget, how will the Department of Agriculture serve the West Virginia poultry industry to address water quality and conservation problems?

Answer. The Agricultural Conservation Program objectives include controlling pollution from agricultural waste and improving water quality throughout the nation. Two ACP practices in particular will serve West Virginia poultry producers: Agricultural Composting Facilities and Agricultural Waste Control Facilities, which are available when agricultural waste from a farming operation constitutes a significant pollution hazard. The composting practice encourages poultry producers to utilize this innovative method of dealing with agricultural waste. Producers are eligible to receive up to 75 percent cost-sharing for these practices. At the requested level of funding, State and county committees will offer cost-share assistance for only the highest priority practices.

FOREIGN AGRICULTURAL SERVICE
QUESTIONS SUBMITTED BY SENATOR COCHRAN

PROPOSED P.L. 480 FY 95 RESCISSIONS AND FY 96 REDUCTIONS

Question. The President has submitted requests to the Congress to rescind a total of \$142.5 million in P.L. 480 budget authority and \$152.7 million in program level. The rescissions proposed would reduce Title I subsidy budget authority by \$43.9 million (the Title I credit level would be reduced by \$54.1 million) and Title I ocean freight differential budget authority and program level by \$6.1 million. The total reduction in Title I would be \$50 million in budget authority and \$60.2 million in program level. In addition, a reduction of \$92.5 million is proposed in Title III budget authority and program level. Further reductions in P.L. 480 funding for Titles I, II, and III are proposed for fiscal year 1996.

Secretary Moos, you indicate that the proposed fiscal year 1995 and 1996 reductions in P.L. 480 are necessitated by constrained spending targets for the U.S. international programs and the need to accommodate increased expenditures for high priority activities. What are the constraints on spending for international programs and why was P.L. 480 determined to be a lower priority program?

Answer. The Administration's budget request for our major international food aid program, P.L. 480, is a clear reflection of the extraordinary pressures on the U.S. budget. This pressure is especially great on the International Affairs Function (150) account, which often does not receive wide support in Congress. In accord with the P.L. 480 authorizing legislation, P.L. 480 is not part of the agricultural account (350) but rather is part of the international affairs budget. This places the P.L. 480 budget in this very constrained account which must fund such other international affairs priorities such as the U.S. contributions to multilateral development banks, the IMF, the ExIm bank, support for the newly independent states of the former Soviet Union, the Central and Eastern European countries, and Economic Support Funds for Israel and Egypt. In the final analysis within the Executive Branch, the pain of cutting in the 150 account has to be shared by many programs and P.L. 480 was among these.

Question. The Administration is proposing to rescind fiscal year 1995 funds provided for P.L. 480 Titles I and III. Which countries would be impacted by the Title I rescission proposed? How would commodity sales be impacted by this rescission?

Answer. The \$60.2 million proposed program level rescission would reduce funds for long-term commodity credit programs by \$54.1 million and funds for cargo preference costs or the ocean freight differential by \$6.1 million. The proposed Title I programs for Albania, El Salvador, Guatemala, Morocco and Yemen would be terminated, whereas programs for the Philippines and the Former Yugoslavia Republic of Macedonia would be reduced. The funds set aside for the unallocated reserve would be

eliminated. The commodities not programmed as a result of the rescission include an estimated 230,000 metric tons of wheat, feed grains, rice, tallow and vegetable oil.

Question. Which countries would be impacted by the Title III funding rescission? How would commodity sales be impacted by this rescission?

Answer. The Administration's proposed \$92.5 million rescission for P.L. 480 Title III in FY 1995 would permit a program of \$64.9 million. With this limited amount of resources, we will provide funding for very high priority programs in Ethiopia, Mozambique, Bangladesh, Guyana, Haiti and Honduras.

As indicated in the USAID 1996 Congressional Presentation, previously planned multi-year Title III programs that would not be funded under this appropriations level are in Bolivia, Ghana, Nicaragua, Senegal, Sri Lanka, and Uganda. If the rescission request is enacted, approximately \$69 million less in U.S. agricultural commodities will be provided to Title III-eligible countries in fiscal year 1995.

Question. While rescissions are being proposed in funding for P.L. 480 Titles I and III, the President has requested fiscal year 1995 supplemental language to expand the Department's food aid activities through the Food for Progress Program.

Why are you proposing to expand the Department's foreign food aid activities through the Food for Progress program and to reduce its foreign food aid activities through the P.L. 480?

Answer. P.L. 480 funding is included in the International Affairs Function 150 account where funding is very tight. Given the many critical funding needs in the foreign affairs area, the decision was made to reduce P.L. 480, primarily Title III and Title I.

The Administration's commitment to increase spending for some agriculture-related export programs, referred to as "greenbox" proposals was made in response to Congressional concerns that implementation of the Uruguay Round Agreement would reduce spending for other agriculture-related programs. These proposals include an increase for Food for Progress because it is a flexible program for providing food assistance and helps support agricultural exports. In addition, "greenbox" funding is not part of the International Affairs account.

Question. Which countries would receive additional assistance under the Food for Progress Program if the supplemental language is approved? How would this affect commodity sales?

Answer. At this time we would expect to be able to respond to additional requests from the private voluntary organizations (PVOs) to assist

needy people in the poorer parts of the former Soviet Union, especially in Armenia and Georgia. This additional funding will also allow us to consider assistance to some very needy countries, such as Albania. We would anticipate providing some bulk commodities, probably wheat, as well as some high value commodities, most likely pulses, vegetable oils, flour, and rice.

Question. Last year, the Administrator of the U.S. Agency for International Development, J. Brian Atwood, sent me a letter stressing the importance of preserving a strong Title III Food for Development Program. He indicated to me that Title III provides one of the best tools we have for helping poor countries escape from a desperate cycle of poverty and hunger. He emphasized that any significant reductions from the \$160 million fiscal year 1995 level requested by the President for P.L. 480 Title III would make it virtually impossible to sustain the program. Due to budget constraints, the Congress approved a slight reduction in the fiscal year 1995 Title III program level, from the \$160 million level requested to \$157.442 million.

Now, the President is proposing a \$92.5 million rescission in funding for P.L. 480 Title III which would reduce the program level to \$64.9 million. For fiscal year 1996, the President proposes that the program be reduced to \$50 million.

Won't it be impossible to sustain the program at such lower funding levels, as the Administrator of A.I.D. indicated to me last year?

Answer. Clearly, a reduction of this magnitude in the Title III program will result in a major shift of priorities and a greatly reduced number of countries receiving Title III commodities. However, the need to reduce the budget forced us to reduce funding levels. In order to accommodate this major shift and in order to make the most effective use of highly constrained resources, USAID recently tightened its allocation criteria to focus Title III on countries based on the following criteria:

- relative food need,
- special Administration priorities, and
- on-going Mission commitments.

USAID will give greater priority in allocating food aid to those countries that need food most and, within those countries, will concentrate on programs with direct linkages to increased agricultural production and consumption. For fiscal year 1996, we are proposing funding programs for Ethiopia, Mozambique and Haiti. These countries are among the poorest in the world.

Question. The funding reductions proposed would indicate that the Administration no longer sees P.L. 480 Title III as an invaluable development resource for assisting needy, food deficit countries. Why?

Answer. This Administration still views the Title III program as an

important instrument for enhancing food security in least-developed countries. Despite economic growth and increased global food supplies, malnutrition and bad agricultural policies still persist in many countries. Title III programs remain one of the best and most flexible methods in the USAID portfolio for addressing, on a country level, policy constraints effecting food security issues.

However, we are in the position of having to make difficult choices in a constrained budget environment. Within an overall foreign affairs budget, we have accepted the need to lower the Title III levels because other accounts had to be given priority in our fiscal year 1996 request including Title II. Nevertheless, we remain convinced that Title III has an important place in USAID's development assistance arsenal and, given budget constraints, should be used to support highly focused programs in selective food-insecure countries.

Question. Section 412(b) of P.L. 480 states that at least 40 percent of the total amount appropriated for Titles I and III should be allocated to Title III. Does this Administration's revised fiscal year 1995 request and its fiscal year 1996 request comply with this provision?

Answer. The Administration's revised 1995 and proposed 1996 budget request will not allow for compliance with this provision. The Administration decided to request less for Title III because of the exceedingly constrained outlay limitations for the Function 150 account necessitating these difficult decisions.

Question. What efforts are being made to protect the funding for non-emergency Title II development programs?

Answer. USAID clearly has a strong commitment to sustaining Title II development programs. We value our relationship with our PVO development partners and are currently collaborating with the food aid PVOs in order to streamline management systems and improve our joint activity techniques in assessment of program impact. As reflected in USAID's 1996 Congressional Presentation, the proposed Title II development program allocations reflect increased funding for Private Voluntary Organization programs with emphasis on the Greater Horn of Africa.

USAID is strongly committed to our Title II-funded PVO sustainable development activities and believes that these programs, addressing food security issues as a high priority, are essential in the long run to preventing complex emergencies--or at least mitigating their human impact.

However, USAID and this Administration are also strongly committed to responding quickly and effectively to emergencies, especially highly complex emergencies such as Rwanda. We endeavor in our budget requests to anticipate the needed funding levels for emergencies in the coming fiscal

year. Given the highly unique nature of emergency response programs, forecasting famine, drought, large refugee movements or civil wars is highly complex and often inaccurate.

Reconciling these two positions in the current budgetary environment is very difficult.

The flexibility currently built into the P.L. 480 law and the accompanying appropriations allow the Administration to respond to food emergencies and highly complex humanitarian relief efforts in a quick and effective manner. As we have in previous years, we will endeavor to ensure that other, non-emergency activities under P.L. 480 equally share the burden for any unanticipated emergency response requirements. In part, we have used Titles I and III, section 416(b) and the Food Security Wheat Reserve. This has enabled us to maintain Title II sustainable development programs as a priority among nonemergency programs.

We would like to develop greater flexibility so that necessary resources are available to respond to emergencies. More effective coordination and wider burden sharing among donors for emergencies is part of the answer. Better planning for complex emergencies, which can extend for many years, is also important.

Ultimately, we recognize that we must use all resources at our disposal to meet urgent humanitarian and emergency requirements rather than seeking additional budgetary resources in this time of fiscal constraint.

Question. For the record, please provide the amount of debt forgiven or reduced that was owed to CCC by countries as a result of their participation in the P.L. 480 Title I concessional sales program.

Answer. We will be happy to provide that data.
[The information follows:]

COMMODITY CREDIT CORPORATION
FOREIGN DEBT FORGIVENESS

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ENTERPRISE FOR THE AMERICAS			SECTION 411	POLAND
LEGISLATIVE AUTHORITY	Title VI, Section 604 of Public Law 480, as amended by the Food Agricultural, Conservation and Trade Act of 1990	Title IV, Section 411 Public Law 480, as amended by the Food Agricultural, Conservation and Trade Act of 1990	Foreign Operations Appropriations Act of 1991, Section 579	
DEBT COVERED	P L. 480, Title I	P L. 480, Title I	P L. 480, Title I	
ELIGIBILITY POOL	Latin American Countries Caribbean Countries	Least Developed Countries	Poland Exclusively	
COUNTRIES AND AMOUNTS FORGIVEN (\$ MILLION)	FY 1991 Bolivia \$30.7 Jamaica \$216.7 Chile \$15.9 Total \$263.3 FY 1993 El Salvador \$268.4 Uruguay \$0.4 \$268.8	FY 1991 Ghana \$95.8 Kenya \$102.0 Madagascar \$53.4 Malawi \$2.2 Mozambique \$52.9 Tanzania \$59.1 Uganda \$16.3 Senegal \$34.5 Guyana \$37.1 Haiti \$98.8 Honduras \$108.9 Nicaragua \$24.8 Total \$685.8	FY 1994 Poland \$65.4 P L. 480	

EXPORT SUBSIDY PROGRAMS

Question. The Uruguay Round Agreement on Agriculture provides for export subsidy practices of agricultural exporting countries to be reduced over a six-year period. You indicate that the fiscal year 1996 program levels for the Department's export subsidy programs--the Export Enhancement Program, the Dairy Export Incentive Program, and the Sunflower and Cottonseed Oil Assistance Programs (SOAP and COAP) are at the maximum levels consistent with the quantity and expenditure reduction commitments.

Would you please provide for the record the fiscal year 1996 levels proposed for each of these export subsidy programs and the maximum levels for each of these programs permitted by the Uruguay Round Agreement on Agriculture for each of the next five fiscal years?

Answer. I will provide that information for the record.
[The information follows:]

The proposed 1996 program level for each export subsidy program is as follows:

Export Enhancement Program	\$ 958.7 million
Dairy Export Incentive Program	116.9 million
Sunflowerseed/Cottonseed Oil Export Assistance Programs	23.9 million

Also provided for the record is a table containing the U.S. expenditure and quantity ceiling commitments throughout the implementation period. The Administration's proposed budget fully funds U.S. export subsidy programs up to the WTO expenditure ceilings except in the case of dairy products for which we expect the quantity limitations to be more restrictive. The CCC budget estimates for DEIP, however, can be adjusted upwards to as high as the maximum allowable expenditure levels should the quantity ceilings prove less restrictive than presently expected. It should be noted that Uruguay Round commitments are based on the commodity exported and not on the total program. For example, while the total fiscal year 1996 expenditure ceiling on vegetable oils is \$53.0 million, it does not matter how the U.S. Government splits the amount between the EEP, SOAP and COAP as long as the total of the three programs for the subsidized export of vegetable oil does not exceed the vegetable oil ceiling. Based on recent program history, 55 percent of the allowable expenditures during fiscal years 1991-2001 has been allocated to EEP and 45 percent to SOAP and COAP, and the annual funding levels for these programs have been established accordingly.

[The information follows:]

U. S. SUBSIDIZED EXPORTS UNDER URUGUAY ROUND AGREEMENT

COMMODITY	QUANTITY (thous tons)							
	Base			Commitment				
	1986-90	1991-92	7/95-6/96	7/96-6/97	7/97-6/98	7/98-6/99	7/99-6/00	7/00-6/01
WHEAT/FLOUR	18,382	21,382	20,238	19,095	17,952	16,809	15,665	14,522
COARSE GRAINS	1,975		1,906	1,837	1,768	1,699	1,630	1,561
RICE	49	318	272	225	178	132	85	39
VEGETABLE OILS	179	677	588	498	409	320	231	141
BUTTER/BUTTEROIL	27	47	43	39	34	30	25	21
SKIM MILK POWDER	86	116	108	100	92	84	76	68
CHEESE	4	4	4	4	4	3	3	3
OTHER (WMP)	0.04	15	12	10	7	5	3	0.03
BOVINE MEAT	22		21	21	20	19	18	18
PIGMEAT	0.5		0.5	0.5	0.4	0.4	0.4	0.4
POULTRY MEAT	35		34	33	32	30	29	28
LIVE DAIRY CATTLE (head)	13,955		13,467	12,978	12,490	12,001	11,513	11,024
EGGS [000 doz]	8,759	34,930	30,262	25,593	20,925	16,256	11,588	6,920

COMMODITY	BUDGET OUTLAYS (\$million)							
	Base		Commitment					
	1986-90	1991-92	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
WHEAT/FLOUR	568.5	845.8	765.5	685.2	604.8	524.5	444.2	363.8
COARSE GRAINS	72.1		67.7	63.4	59.1	54.8	50.4	46.1
RICE	3.7	18.4	15.7	13.0	10.4	7.7	5.0	2.4
VEGETABLE OILS	22.0	60.7	53.0	45.2	37.4	29.6	21.9	14.1
BUTTER/BUTTEROIL	47.7		44.8	41.9	39.1	36.2	33.4	30.5
SKIM MILK POWDER	128.8		121.1	113.4	105.7	97.9	90.2	82.5
CHEESE	5.7		5.3	5.0	4.7	4.3	4.0	3.6
OTHER (WMP)	0.033	17.2	14.4	11.5	8.6	5.8	2.9	0.021
BOVINE MEAT	35.7		33.5	31.4	29.2	27.1	25.0	22.8
PIGMEAT	0.8		0.7	0.7	0.6	0.6	0.5	0.5
POULTRY MEAT	22.7		21.4	20.0	18.6	17.3	15.9	14.6
LIVE DAIRY CATTLE	18.6		17.5	16.3	15.2	14.1	13.0	11.9
EGGS	2.5	8.8	7.6	6.4	5.2	4.0	2.8	1.6
TOTAL	928.7		1,168.2	1,053.4	938.7	823.9	709.1	594.4

EXPORT SUBSIDY PROGRAMS

Question. What is the current spending level under EEP as of this date for fiscal year 1995? How does that compare to the fiscal year spending level under EEP at this same point in time in fiscal year 1994?

Answer. Under the Export Enhancement Program, the current spending level for fiscal year 1995 is about \$248 million. The spending level for the comparable period of fiscal year 1994 was about \$600 million. As you may be aware, our bonus levels are considerably lower this year.

Question. Please provide for the record the type, amount and value of exports under EEP for fiscal year 1994 and for fiscal year 1995 to date.

Answer. I will provide that information for the record.

[The information follows:]

EXPORT ENHANCEMENT PROGRAM
Sales for Fiscal Year 1995 As of March 21, 1995
By Commodities and Countries

Country	Quantity	UOM	Bonus Awarded	Sales Price * Quantity
Barley Malt				
Brazil	15,000	MT	\$704,520.00	\$4,761,000.00
Caribbean Countries	30,000	MT	\$750,000.00	\$9,900,000.00
Central American Countries	9,000	MT	\$449,780.00	\$2,198,500.00
Colombia	14,000	MT	\$224,000.00	\$4,956,000.00
Korea	2,000	MT	\$55,540.00	\$602,000.00
South Africa	10,000	MT	\$430,000.00	\$2,944,000.00
The Philippines	25,000	MT	\$750,000.00	\$7,250,000.00
Venezuela	2,500	MT	\$135,000.00	\$925,000.00
Total	107,500	MT	\$3,498,840.00	\$33,536,500.00

Barley or Malting Barley			
China	75,000 MT	\$1,963,750.00	\$8,705,000.00
Total	75,000 MT	\$1,963,750.00	\$8,705,000.00
Eggs			
Hong Kong	7,312,810 DOZEN	\$1,399,974.78	\$4,584,485.50
Near East Countries	8,730,050 DOZEN	\$2,187,972.06	\$5,034,402.21
Total	16,042,860 DOZEN	\$3,587,946.84	\$9,618,887.71
Feed Grains			
Cyprus	23,760 MT	\$759,844.80	\$2,667,060.00
Egypt	25,000 MT	\$693,000.00	\$2,875,000.00
Israel	108,548 MT	\$3,202,701.24	\$9,653,749.00
Saudi Arabia	200,000 MT	\$5,754,000.00	\$24,200,000.00
Total	357,308 MT	\$10,409,546.04	\$39,395,809.00
Frozen Pork			
The Former Soviet Union	21,030 MT	\$12,704,714.00	\$28,156,800.00
Total	21,030 MT	\$12,704,714.00	\$28,156,800.00
Frozen Poultry			
Egypt	1,450 MT	\$761,650.00	\$1,655,500.00
Saudi Arabia	6,266 MT	\$3,586,902.00	\$7,064,140.00
Singapore	902 MT	\$272,734.00	\$1,203,070.00
Total	8,618 MT	\$4,621,286.00	\$9,922,710.00
Rice			
East European Countries	20,350 MT	\$1,428,045.00	\$6,436,340.00
Israel	5,500 MT	\$329,450.00	\$1,311,000.00
Lebanon	10,000 MT	\$250,400.00	\$3,932,000.00
The Former Soviet Union	5,140 MT	\$350,180.00	\$1,741,612.00
Turkey	30,000 MT	\$360,000.00	\$10,290,000.00
Total	70,990 MT	\$2,718,075.00	\$23,710,952.00
Wheat			
Africa Southern Region	109,090 MT	\$3,505,126.50	\$16,652,610.00
Africa West & Central Regi	124,940 MT	\$4,035,313.00	\$17,431,340.00
Algeria	225,000 MT	\$4,850,000.00	\$39,075,000.00
Bahrain and Kuwait	66,800 MT	\$1,585,702.00	\$9,818,200.00
Bangladesh	533,650 MT	\$10,008,159.50	\$81,747,700.00
China	3,365,000 MT	\$62,420,850.00	\$75,637,500.00
Cyprus	18,000 MT	\$36,000.00	\$3,456,000.00
Egypt	2,068,715 MT	\$44,901,411.05	\$208,710,720.00
Finland	13,000 MT	\$348,790.00	\$1,781,000.00
Honduras	12,100 MT	\$60,502.00	\$2,176,400.00
Jordan	199,250 MT	\$4,048,592.50	\$35,317,000.00
Lebanon	121,250 MT	\$2,558,957.50	\$17,148,250.00
Malta	9,400 MT	\$183,622.00	\$1,762,500.00
Morocco	30,000 MT	\$299,400.00	\$6,178,500.00
Nicaragua	17,508 MT	\$94,368.12	\$3,014,946.30
Pakistan	762,800 MT	\$9,316,992.00	\$113,461,500.00
Slovenia	50,000 MT	\$1,556,500.00	\$7,250,000.00
Sri Lanka	199,750 MT	\$2,647,030.00	\$29,090,500.00
Sub-Saharan African Countr	704,560 MT	\$13,308,970.80	\$106,003,520.20
The Philippines	680,400 MT	\$7,727,069.00	\$106,656,500.00
Trinidad and Tobago	78,000 MT	\$961,080.00	\$11,891,950.00
Tunisia	300,000 MT	\$2,557,750.00	\$69,063,500.00
Turkey	60,000 MT	\$1,431,650.00	\$6,382,500.00
Yemen	275,000 MT	\$6,275,600.00	\$42,235,000.00
Total	10,024,213 MT	\$184,719,435.97	\$1,011,942,636.50
Wheat Flour			
Egypt	12,500 MT	\$1,125,000.00	\$2,462,500.00
Sub-Saharan African Countr	3,000 MT	\$268,750.00	\$875,500.00
Yemen	250,000 MT	\$22,449,100.00	\$53,087,500.00
Total	265,500 MT	\$23,842,850.00	\$56,425,500.00
Grand Total		\$248,066,443.85	\$1,221,414,795.21

DISCLAIMER: Prices do not reflect bonus awards, and may or may not include shipping costs and/or insurance, and cannot be considered an accurate reflection of the actual U.S. value of the commodities.

EXPORT ENHANCEMENT PROGRAM
Sales for Oct 1 1993 - Mar 21 1994 By Commodities and Countries

Country	Quantity	UOM	Bonus Awarded	Sales Price * Quantity
Barley Malt				
Caribbean Countries	20,850 MT		\$2,706,330.00	\$4,307,610.00
Central American Countries	7,300 MT		\$992,000.00	\$1,583,000.00
Korea	2,500 MT		\$339,850.00	\$460,150.00
Singapore	350 MT		\$54,600.00	\$85,400.00
The Philippines	10,000 MT		\$1,625,000.00	\$1,530,000.00
Total	41,000 MT		\$5,717,780.00	\$7,966,160.00
Eggs				
Hong Kong	9,801,690 DOZEN		\$2,559,698.30	\$6,111,270.63
Near East Countries	2,712,160 DOZEN		\$498,932.89	\$1,845,196.62
Total	12,513,850 DOZEN		\$3,058,631.18	\$7,956,467.25
Feed Grains				
Algeria	217,750 MT		\$12,550,675.00	\$18,944,750.00
Cyprus	25,000 MT		\$1,419,750.00	\$1,949,250.00
Israel	154,565 MT		\$8,840,114.65	\$10,247,972.50
Jordan	99,000 MT		\$5,708,340.00	\$8,019,000.00
Saudi Arabia	200,000 MT		\$11,343,500.00	\$16,400,000.00
Slovenia	17,500 MT		\$965,090.00	\$818,250.00
Total	713,815 MT		\$40,827,469.65	\$56,379,222.50
Frozen Poultry				
Egypt	4,000 MT		\$3,288,000.00	\$4,160,000.00
Gulf Countries	6,847 MT		\$4,905,604.00	\$7,881,381.00
Saudi Arabia	3,777 MT		\$2,748,875.00	\$4,244,875.00
Singapore	88 MT		\$44,792.00	\$99,440.00
Total	14,712 MT		\$10,987,271.00	\$16,385,696.00
Rice				
Algeria	10,000 MT		\$737,500.00	\$3,980,000.00
East European Countries	780 MT		\$62,340.00	\$226,040.00
Turkey	3,000 MT		\$102,000.00	\$1,134,000.00
Total	13,780 MT		\$901,840.00	\$5,340,040.00
Vegetable Oil				
Algeria	104,000 MT		\$13,916,820.00	\$62,306,000.00
Egypt	10,000 MT		\$975,400.00	\$5,730,000.00
Mexico	8,000 MT		\$636,020.00	\$5,415,000.00
Tunisia	17,250 MT		\$2,360,227.50	\$10,140,375.00
Turkey	21,000 MT		\$2,312,755.00	\$12,350,000.00
Total	160,250 MT		\$20,201,222.50	\$95,941,375.00
Wheat				
Algeria	954,000 MT		\$53,871,930.00	\$128,144,000.00
Bahrain and Kuwait	33,400 MT		\$1,929,570.00	\$3,035,800.00
Bangladesh	67,250 MT		\$3,581,200.00	\$7,390,250.00
China	815,000 MT		\$53,472,250.00	\$72,127,500.00
Cyprus	38,915 MT		\$2,138,271.45	\$5,654,715.00
Egypt	1,476,740 MT		\$84,148,095.10	\$136,958,170.00
Finland	9,750 MT		\$526,350.00	\$1,511,250.00
Honduras	45,000 MT		\$1,295,950.50	\$8,119,068.50
Jordan	248,700 MT		\$13,872,881.50	\$30,590,100.00
Lebanon	100,065 MT		\$5,687,104.90	\$8,551,704.00
Malta	9,000 MT		\$336,240.00	\$1,404,000.00
Mexico	421,723 MT		\$14,970,215.09	\$56,230,220.50
Morocco	319,800 MT		\$19,971,328.00	\$33,781,200.00
Nicaragua	49,250 MT		\$1,634,978.50	\$8,536,207.50
Norway	22,000 MT		\$1,075,390.00	\$3,022,000.00
Pakistan	600,000 MT		\$21,176,250.00	\$58,200,000.00
Slovenia	28,800 MT		\$1,750,344.00	\$2,189,400.00
South Africa	62,693 MT		\$3,677,399.76	\$7,773,963.00
Sri Lanka	300,000 MT		\$13,913,000.00	\$33,374,000.00
Sub-Saharan African Countr	769,974 MT		\$44,693,088.35	\$84,876,115.50
The Former Soviet Union	539,800 MT		\$32,918,316.00	\$59,151,000.00
The Philippines	1,173,500 MT		\$49,748,635.00	\$157,327,925.00
Trinidad and Tobago	71,400 MT		\$2,957,355.00	\$8,908,100.00
Tunisia	199,750 MT		\$12,435,098.75	\$22,764,000.00
Turkey	73,750 MT		\$4,094,417.50	\$8,226,500.00
Yemen	169,800 MT		\$7,283,338.00	\$16,892,000.00
Total	8,600,060 MT		\$453,158,997.40	\$964,739,189.00

Wheat Flour			
Egypt	142,990 MT	\$19,437,641.50	\$25,399,110.00
Lebanon	35 MT	\$4,305.00	\$14,245.00
Sub-Saharan African Countries	18,000 MT	\$2,472,300.00	\$3,648,000.00
Yemen	300,000 MT	\$43,320,750.00	\$44,762,500.00
Total	461,025 MT	\$65,234,996.50	\$73,823,855.00

Grand Total		\$600,088,208.23	\$1,228,532,004.75
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DISCLAIMER: Prices do not reflect bonus awards, and may or may not include shipping costs and/or insurance, and cannot be considered an accurate reflection of the actual U.S. value of the commodities.

EXPORT SUBSIDY PROGRAMS

Question. As of this date, what is the total bonus value awarded in fiscal year 1995 for cottonseed oil under COAP and for sunflowerseed oil under SOAP?

Answer. As of March 15, there have been no bonuses awarded for fiscal year 1995 for cottonseed oil under COAP or for sunflowerseed oil under SOAP.

FOREIGN COOPERATOR PROGRAM

Question. Mr. Schumacher, you have indicated in a recent letter to me that the fiscal year 1995 Cooperator marketing plans have been maintained at the fiscal year 1994 levels by drawing down unliquidated balances, as directed by the Committee. As a result, unliquidated program balances available for program activities have been reduced from \$26.4 million to \$15.4 million.

You are requesting only a \$2 million increase in fiscal year 1996 funding for the Cooperator Program. Will you be able to use remaining unliquidated program balances in fiscal year 1996 to maintain Cooperator marketing plans at the fiscal year 1994 levels?

Answer. Unprogrammed agreement balances for the Cooperator Program will be reduced by about \$10 million during fiscal year 1995 to about \$15.4 million. Anticipating approval of the Administration's budget request, Federal funding for Cooperator marketing plans for fiscal year 1996 will be reduced by 20 percent and unprogrammed balances will be further reduced to a level sufficient to support the program for about 6 months. We feel that this level of unprogrammed balances is the minimum necessary to allow orderly management of the program.

Question. Fiscal year 1995 funding for the Cooperator Program was reduced \$10 million below the fiscal year level. Why aren't you proposing in fiscal year 1996 to fully restore the fiscal year 1994 appropriation level, or to increase funding above that level, for the Cooperator Program as part of the Administration's "greenbox" proposals?

Answer. The Administration has fully met its "greenbox" commitment in the fiscal year 1996 budget request. We anticipate that the level of Cooperator activities will be maintained through an increase in the private sector cost-share component. Federal funds will be directed where the greater net trade benefits can result.

Question. Could you provide a breakdown of how the funds for the cooperator program were allocated in fiscal year 1994 and in 1995 to date?

Answer. I am providing for the record a listing of Foreign Market Development Budgets for fiscal year 1994 and 1995.

[The information follows:]

FY 1994 and FY 1995 COOPERATOR BUDGETS

	<u>FY 1994</u> <u>Marketing Plan</u>	<u>FY 1995</u> <u>Marketing Plan</u>
U.S. Wheat Associates	\$ 6,686,000	\$ 6,686,000
American Soybean Association	6,722,000	6,672,000
U.S. Feed Grains Council	5,841,000	5,841,000
Amer. Forest & Paper Association	2,912,000	2,777,800
Cotton Council International	1,813,000	1,813,000
U.S. Meat Export Federation	1,937,000	1,797,000
USA Rice Council	1,742,000	1,742,000
USA Poultry & Egg	1,560,000	1,560,000
National Renderers Association	1,137,000	1,137,000
U.S. Livestock Genetics Export	542,000	624,000
National Peanut Council	621,000	621,000
National Dairy Board	363,000	363,000
National Sunflower Association	273,000	273,000
American Seed Trade Association	214,000	214,000
NASDA	186,000	186,000
USA Dry Pea & Lentil	160,000	160,000
Leather Industries Association	159,000	159,000
American Horticultural Marketing Council	222,000	154,000
National Cottonseed Producers	141,000	141,000
American Sheep Industry	129,000	129,000
WUSATA	127,000	127,000
U.S. Beef Breeds Council	106,000	106,000
National Dry Bean Council	98,000	98,000
SUSTA	91,000	91,000
MIATCO	91,000	91,000
EUSAFEC	91,000	91,000
National Hay Associates	62,000	62,000
Protein Grain Products	62,000	62,000
Papaya Administrative Commission	57,000	57,000
National Swine Records	50,000	50,000

U.S. Hide, Skin & Leather	42,000	42,000
American Quarter Horse	23,000	23,000
Millers National Federation	19,000	19,000
Mohair Council of America	19,000	19,000
Western Growers Association	11,000	11,000
Appaloosa Horse Club	9,000	9,000
National Animal Breeders	<u>82,000</u>	<u>0</u>
TOTALS	\$34,400,000	\$34,107,800

COCHRAN FELLOWSHIP PROGRAM

Question. The fiscal year 1996 request includes an increase of \$250,000 above the fiscal year 1995 base for the Cochran Fellowship Program. The budget indicates that this additional funding will support the expansion of the program into Asia, particularly Indonesia and the Philippines.

What is the total funding level proposed for fiscal year 1996 for the Cochran Fellowship Program?

Answer. The total funding request for fiscal 1996 is \$2,428,000 which is \$250,000 above the fiscal year 1995 base of \$2,178,000.

Question. When you testified before this Subcommittee last year, you indicated that you were considering the possibility of expanding the program into Indonesia and the Philippines in fiscal year 1995 and that funds for countries no longer participating in the program would be reprogrammed for pilot efforts in these two new countries. Is that being done?

Answer. Three Asian countries--Hong Kong, Taiwan, and Singapore--are no longer middle-income countries: they have graduated to high-income country status. Consequently, the Cochran Fellowship Program reduced these countries' allocations by one-half in fiscal year 1995, with total phase-out from the program in fiscal year 1996. We have used these funds to initiate pilot programs in fiscal year 1995 for Indonesia and the Philippines.

Question. You are proposing additional funding in fiscal year 1996 to expand the program into Asia, particularly Indonesia and the Philippines. Which Asian countries are currently participating in the program and how many additional countries and number of fellowships will be supported with the increased funding proposed?

Answer. The request for additional funding in fiscal year 1996 was to bring Indonesia and Philippines into the Cochran Fellowship Program and to increase the number of participants from other Asian countries. In fiscal year 1995, the Cochran Fellowship Program has programs in China (concentrated in the Shenzhen Special Economic Zone), Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, and Thailand. With our fiscal year 1995 funding, we expect about 113 participants from Asia: 22 from China, 5 from Hong Kong, 12 from Indonesia, 14 from Malaysia, 12 from

Philippines, 8 from Singapore, 20 from South Korea, 8 from Taiwan, and 12 from Thailand.

The total phase out of the program in Hong Kong, Singapore and Taiwan in fiscal year 1996, plus the additional \$250,000 would allow us to add about 60 to 65 participants from Asia in fiscal year 1996, an increase of about 10 participants per country in Indonesia, the Philippines, South Korea, Thailand, Malaysia, and China. With the rapidly expanding economic situation in the Asian region, the above mentioned Asian countries hold great potential for increased agricultural trade. We are requesting the additional funding to take advantage of these opportunities.

Question. Are available resources for the program sufficient to extend fellowships to other countries seeking to participate in the program?

Answer. No. The success of the Cochran Fellowship Program to initiate and pursue short- and long-term trade objectives and to influence public and private sector decision makers has led to increased requests to initiate the program in countries around the world. In fiscal year 1994, for example, we received requests from USDA Agricultural Affairs Officers and other U.S. agricultural organizations for expansion of the program into Bolivia, Brazil, Vietnam, Cambodia, Burma, Romania, Croatia, Slovenia, Macedonia, South Africa, Namibia, and Senegal. Although we have been fortunate to receive other sources of funding, such as USDA's emerging democracies program and the Agency for International Development (AID), to initiate and/or expand our program in the countries indicated above would require additional resources or a shifting of resources from other countries which could diminish the program's effectiveness.

Question. I understand that in fiscal year 1994, the Cochran Fellowship Program received additional support through the emerging democracies program and the Agency for International Development (AID). What additional funding was provided by the emerging democracies program and the AID in fiscal year 1994? What level of support do you expect to receive for the program from the emerging democracies program and AID in each of fiscal years 1995 and 1996?

Answer. In fiscal year 1994, the Cochran Fellowship Program received \$750,000 from the emerging democracies program to support the program in the Eastern/Central European countries of Poland, Hungary, Czech Republic, Slovak Republic, Bulgaria, Slovenia and Albania. In addition, the emerging democracies program had provided \$1.0 million in fiscal year 1993 funds to support the Cochran Fellowship Program's fiscal year 1994 program activities in Russia, Ukraine, Kazakhstan, and Uzbekistan.

In fiscal year 1994, the Cochran Fellowship Program received \$2.5 million from AID (\$1.5 million in June 1994 and \$1.0 million in September 1994) under the Freedom Support Act to fund the program in 11 countries (excluding Ukraine) of the NIS: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, and Uzbekistan.

In fiscal year 1995 to date, the emerging democracies program has provided \$1.3 million for the Cochran Fellowship Program: \$1.0 million for Russia, Belarus, Kazakhstan, and Ukraine; and \$300,000 to initiate the Cochran Fellowship Program in South Africa. AID has provided \$2.25 million in Freedom Support Act funds to support the program in all 12 countries of the NIS in fiscal year 1995.

Generally, we would expect that the Cochran Fellowship Program would be funded at approximately the same level for fiscal year 1996 as it was for fiscal year 1995.

With regard to AID funding, according to the Office of the NIS Coordinator at the Department of State, it has been proposed that fiscal year 1996 AID funding for the Cochran Fellowship Program in the NIS remain at its 1995 level of \$2.25 million.

Question. What benefits to U.S. agriculture have resulted from the Cochran Fellowship Program?

Answer. The Cochran Fellowship Program has provided a cost effective tool in promoting U.S. agricultural exports, addressing policy issues such as food safety and other non-tariff trade barriers, providing technical assistance, promoting mutually beneficial trade and business linkages, as well as fostering goodwill with the United States.

The program provides benefits to a wide range of U.S. agricultural organizations: (1) USDA Agricultural Affairs Officers in countries served by the Cochran Fellowship Program commend the program for providing valuable resources for developing new markets for U.S. agricultural products, addressing trade and policy issues, and establishing long-term trade linkages; (2) U.S. commodity and trade associations state that the Cochran Fellowship Program is of proven benefit to their export development programs; (3) U.S. universities and State departments of agriculture indicate that the program has benefitted their respective state agricultural trade industries and provided valuable international contacts for their institutions; and (4) participating countries support the program as an important means of providing technical assistance and furthering trade relationships with the United States.

Although it is often difficult to place a dollar value on the above types of benefits, several reported examples of trade successes speak to the value of the Cochran Fellowship Program to U.S. agriculture:

- The Agricultural Affairs Office in Malaysia reports that a 1994 Malaysian participant ordered over \$300,000 worth of dried fruit and nuts from suppliers on the West Coast during his training and has continued with regular follow-up orders since then.

- The USA Rice Council reports that Cochran-funded training in rice processing and marketing directly influenced Cote d'Ivoire rice processors to

purchase over 125,000 tons of U.S. brown rice since 1989, the value of which is over \$12 million; the Dairy Marketing Board reports that a Cote d' Ivoire Cochran participant initiated the purchase of 15,000 metric tons of dried milk after his Cochran training program in 1994.

- Two Colombian businessmen credit their company's importation of about \$80 to \$90 million worth of U.S. agricultural commodities per year, since 1993, to the agricultural business contacts established for them through the Cochran Fellowship Program.

- The Agricultural Affairs Office in Thailand reports that Cochran training finalized the sale of \$4 million worth of American Brahma cattle, from seven states, to Thailand in 1993, and Cochran trained participants have helped increase sales of U.S. hides and skins exports to Thailand over the past two years.

- A Hong Kong supermarket owner reported that he purchased at least 10 containers of high value U.S. products after his 1993 training, and continues to be regular customer.

- One Polish businessman reported that he purchased over \$850,000 worth of poultry products from the U.S. in 1993 and through July of 1994; another Polish businessman states that his company purchased \$5.5 million worth of U.S. corn after his training. Both give credit to their Cochran programs, which helped provide technical training and establish contacts with U.S. businesses. The Holstein Association reported that 14 Holstein bulls, valued at about \$150,000, were purchased by former Polish Cochran participants in 1993.

- A Russian chocolate manufacturer reports purchasing \$750,000 worth of U.S. almonds after meeting with the U.S. supplier during his Cochran confectionery and baking training program.

- The USDA Agricultural Trade Office (ATO) in Guangzhou, China reports that the firm of a 1993 Cochran participant recently opened two supermarkets and two quick service restaurants. The ATO reports that: "His firm imports increasing amounts of U.S. chicken franks as well as purchases of U.S. potato products and Washington State Apples. He is working with the ATO/Guangzhou to conduct a U.S. food promotion in the restaurants of a hotel owned by his company as well as in the two quick serve restaurants....There is little doubt that without having first participated in the Cochran Program, few of these benefits would have been realized."

- The Agricultural Affairs Office in Korea states..."the program is an invaluable resource. Dollar for dollar, the program provides one of the most cost effective and practical methods available to expand U.S. agricultural exports to Korea, both in the short-term and long-term. Benefits that have resulted from Cochran-funded training in fiscal year 1994 include... a trip initiated by the Republic of Korea' (ROK) decision to implement the "green card" system. This system would have required shipments of grain and

horticultural products to include information on pesticide use on the shipment from the production stage through the entire distribution stage, a requirement that is physically impossible to meet. Cochran-funded training for relevant ROK officials went a long ways in helping to minimize the potential impact on U.S. exports."

Question. Which countries will be served by the program in each of fiscal years 1994 and 1995? Please provide for the record the number of fellowships, amount of funding, and program achievements by country.

Answer. In fiscal year 1994, a total of 451 participants from 34 countries received training. I will provide for the record tables showing fiscal year 1994 participant and funding levels for both 1994 appropriated and non-appropriated funding.

[The information follows:]

TABLE 1
1994 Appropriations
Funding and Participant Levels By Country

<u>Region/Country</u>	<u>1994 Participants and Funding</u>	
<u>Asia</u>	<u>No. of Fellows</u>	<u>Program Funds (\$)</u>
Korea	20	161,500
Taiwan	16	133,500
Malaysia	14	98,350
Singapore	14	133,475
Hong Kong	8	56,200
China--Guongdong Province ...	26	161,600
Thailand	11	98,350
Subtotal	109	843,075
<u>Latin America/Africa/Middle East</u>		
Mexico	18	140,500
Venezuela	12	126,450
Trinidad & Tobago	7	84,300
Colombia	10	77,275
Panama	8	56,200
Cote d' Ivoire	6	49,175
Algeria	4	63,225
Subtotal	65	597,125
<u>East/Central Europe</u>		
Turkey	19	140,500
Poland	18	168,600
Hungary	9	98,350
Czech Republic	10	63,225

Slovakia	3	63,225
Bulgaria	5	98,350
Slovenia	6	77,275
Croatia	2	28,275
Subtotal	72	737,800
Total 1994 Appropriated	246	\$2,178,000

Table 2
1994 Non-Appropriated Funds
Funding and Participant Levels by Country

1994 Participants and Funding

<u>Region/Country</u>	<u>Emerging Democracy</u>		<u>AID</u>	
	No.	\$	No.	\$
<u>Eastern Europe</u>				
Poland	38	200,156	0	0
Hungary	7	54,738	0	0
Czech Republic	4	34,213	0	0
Slovakia	18	99,739	0	0
Bulgaria	17	143,796	0	0
Albania	13	94,370	0	0
Slovenia	2	11,357	0	0
Subtotal	99	638,369	0	0
<u>New Independent States</u>				
Russia	50	517,812	16	179,881
Ukraine	19	230,082	0	0
Belarus	8	68,989	0	0
Kazakhstan	11	139,079	8	84,729
Kyrgyzstan	9	111,532	12	118,028
Uzbekistan	3	30,572	2	21,856
Turkmenistan	0	0	6	76,197
Tajikistan	0	0	8	79,780
Armenia	0	0	5	42,776
Moldova	5	53,879	5	47,450
Georgia	1	9,773	6	67,215
Azerbaijan	0	0	0	0
Subtotal	106	\$1,161,718	68	\$717,912
Total Non-Appropriated ..	205	\$1,800,087	68	\$717,912

In fiscal year 1995, the Cochran Fellowship Program will expand into seven new countries: Indonesia, Philippines, Latvia, Lithuania, Estonia, Tunisia, and South Africa. The program in Tunisia, however, is a shift from Algeria, where USDA closed its office because of the political situation. The following provides our estimate of the number of participants and funding levels for appropriated (Table 3) and non-appropriated (Table 4) funding for fiscal year 1995.

Table 3
1995 Appropriations
Estimated Participant and Funding Levels

<u>Region/Country</u>	<u>1995 Participants and Funding (Estimated)</u>	
<u>Asia</u>	<u>No. of Fellows</u>	<u>Program Funds (\$)</u>
Korea	20	161,575
Taiwan	8	66,740
Malaysia	14	101,860
Singapore	8	66,470
Hong Kong	5	28,100
China (Guongdong Province)	22	161,575
Thailand	12	101,860
Indonesia	12	84,300
Philippines	12	84,300
Subtotal	113	857,050
<u>Latin America/Africa/Middle East</u>		
Mexico	20	140,500
Venezuela	20	126,450
Trinidad & Tobago	12	84,310
Colombia	15	77,275
Panama	9	56,200
Cote d' Ivoire	8	49,175
Tunisia	13	63,225
South Africa	3	30,000
Subtotal	100	627,125
<u>East/Central Europe</u>		
Turkey	10	98,350
Poland	20	140,500
Hungary	9	70,250
Czech Republic	10	63,225
Slovakia	5	63,225
Bulgaria	10	98,350
Slovenia	6	42,150

Croatia	3	21,075
Latvia	6	42,150
Estonia	6	42,150
Lithuania	6	42,150
Subtotal	91	723,825
1995 Total Appropriated .	304	\$2,208,000

Table 4
1995 Non-Appropriated Funding
Estimated Participant and Funding Levels

<u>Region/Country</u>	1995 Participant and Funding Levels (estimated)			
	<u>Emerging</u>	<u>Democracy</u>	<u>AID</u>	
	<u>No.</u>	<u>\$</u>	<u>No.</u>	<u>\$</u>
<u>Eastern Europe</u>				
Poland	38	225,000	0	0
Hungary	9	40,000	0	0
Czech Republic	14	65,000	0	0
Slovakia	14	65,000	0	0
Bulgaria	14	70,000	0	0
Albania	10	76,000	0	0
Slovenia	7	60,000	0	0
Subtotal	92	601,000	0	0
<u>Africa</u>				
South Africa	30	300,000	0	0
Subtotal	30	300,000	0	0
<u>New Independent States</u>				
Russia	50	500,000	45	495,000
Ukraine	31	320,000	20	220,000
Belarus	4	35,000	10	110,000
Kazakhstan	6	60,000	15	160,000
Kyrgyzstan	0	0	12	130,000
Uzbekistan	0	0	15	160,000
Turkmenistan	0	0	18	150,000
Tajikistan	0	0	13	140,000
Armenia	0	0	13	140,000
Moldova	0	0	13	140,000
Georgia	0	0	6	70,000
Azerbaijan	0	0	10	120,000
Subtotal	91	\$920,000	190	\$2,035,000
Total Non-Appropriated .	213	\$1,821,000	190	\$2,035,000

FAS TRADE SHOWS AND SALES MISSION ACTIVITIES

Question. The fiscal year 1996 budget requests an increase of \$600,000 and 2 staff years to expand FAS trade show and sales mission activities. The budget justification indicates that from 1991 to 1993, U.S. exports increased an average of \$76 for every \$1 spent on such activities and that the additional resources requested would increase U.S. exports by \$25 million. How are the export increases from this spending determined?

Answer. At shows sponsored by the Foreign Agricultural Service, each exhibitor must have a sales representative in the booth. As part of their participation agreement, exhibitors report their on-site sales and estimate how much their sales will increase over the next 12 months as a result of the show.

To test the validity of the data collected from exhibitors, we contracted the nation's top trade show evaluator to do a follow-up survey of 300 exhibitors. The survey confirmed the validity of the on-site sales figures that exhibitors have been providing, but it showed that exhibitors typically over estimate their 12-month sales increase by 40 percent. We therefore reduce the 12-month estimates we get from exhibitors to derive more statistically sound export estimates. For example, based on these adjustments, we estimate that the five shows which we sponsored in 1994 facilitated \$60 million in new export business.

If we are able to expand our trade show program, we plan to add more shows in emerging and rapidly growing markets. The objective would be to help U.S. exporters beat our foreign competition into these markets and further diversify our markets for consumer-ready food exports. Our sales estimates are based on on-site sales and exhibitors' estimates of how much their sales will increase over the first twelve months after a show. Our initial increase in sales in these markets is likely to be lower than our current average. In preparing our budget estimate, we took into account the fact that for shows in emerging markets the average sales per exhibitor during the first years are lower than the averages at shows in mature markets. In the long term, however, we expect our new trade shows in emerging markets to facilitate a much more significant increase in annual exports than the \$25 million we have estimated for the first year.

MARKET PROMOTION PROGRAM

Question. The Administration is proposing supplemental language to increase the fiscal year 1995 funding for the Market Promotion Program from \$85.5 million to the full authorized level of \$110 million and to maintain this \$110 million funding level for the program in fiscal year 1996.

Would you please explain how the regulations announced in February will improve the Market Promotion Program, particularly in terms of giving priority to small businesses and reducing and streamlining paperwork requirements?

Answer. Reflecting the Administration's commitment to streamline government programs, the new regulations announced in February increased flexibility and simplified and clarified program requirements. Taking into account private sector recommendations and at the same time maintaining the strengths of the current export programs, these changes were incorporated into the regulation:

- Program allocation procedures give priority to small businesses;
- Paperwork requirements are reduced;
- The application process is explained in step-by-step detail;
- Application and allocation approval criteria are clarified;
- Procedures for appealing compliance findings are added; and
- Program evaluation requirements are clarified and simplified.

Question. For the record, please provide the list of MPP participants and allocations for fiscal year 1994 and fiscal year 1995. For each year, please list each recipient considered to be a small, medium-sized, or large business.

Answer. Provided for the record is a table that lists MPP participants and the allocations they received under the 1994 MPP. Most businesses participating in the MPP brand program do not work directly with the Department, but through non-profit participants. Approximately 40 percent of program funds are provided in support of brand programs, and available information indicates that approximately 41.8 percent of funds provided in the brand portion of the MPP was provided to small businesses.

The allocations for the 1995 MPP have not yet been made; therefore, information on the 1995 program is not yet available.

[The information follows:]

MPP ALLOCATION

<u>PARTICIPANT ORGANIZATION</u>	<u>FY 1994 MPP ALLOCATION</u>
Alaska Seafood Marketing Institute	\$ 4,440,000
Almond Board of California	\$2,810,000
American Brandy Association	\$470,000
American Seed Trade Association	\$78,000
American Sheep Industry Association	\$160,000
American Soybean Association	\$1,720,000
Asparagus USA	\$310,000
California Avocado Commission	\$370,000
California Cling Peach Advisory Board	\$1,090,000
California Kiwifruit Commission	\$270,000
California Pistachio Commission	\$1,150,000
California Prune Board	\$2,180,000
California Strawberry Board	\$520,000

California Table Grape Commission	\$2,520,000
California Tree Fruit Agreement	\$950,000
California Tomato Board	\$300,000
California Walnut Commission	\$2,890,000
Catfish Institute	\$340,000
Cherry Marketing Institute	\$300,000
Chocolate Manufacturers	\$1,080,000
Cotton Council International	\$6,440,000
Eastern U.S. Agricultural and Food Export Council (EUSAFEC)	\$4,430,000
Florida Department of Citrus	\$3,800,000
Ginseng Board of Wisconsin	\$260,000
Hop Growers of America	\$160,000
International Apple Institute	\$340,000
Mid-America International Agri-Trade Council (MIATCO)	\$4,470,000
National Association of State Departments of Agriculture (NASDA)	\$510,000
National Dairy Research and Research Board	\$530,000
National Dry Bean Council	\$830,000
National Honey Board	\$230,000
National Peanut Council	\$870,000
National Potato Promotion Board	\$1,020,000
National Renderers Association	\$380,000
National Sunflower Association	\$620,000
New York Wine and Grape Foundation	\$350,000
Northwest Wine Promotion Coalition	\$470,000
Oregon Seed Council	\$62,000
Oregon-Washington-California Pear Board	\$690,000
Petfood Institute	\$1,140,000
Raisin Administrative Committee	\$3,520,000
Southern U.S. Trade Association	\$4,380,000
USA Dry Pea & Lentil Council	\$400,000
USA Fresh Sweet Cherry Promotion	\$840,000
USA Poultry and Egg Export Council	\$5,120,000
USA Rice Federation	\$3,660,000
U.S. Feed Grains Council	\$3,650,000
U.S. Livestock Genetics Exports	\$860,000
U.S. Meat Export Federation	\$7,200,000
U.S. Mink Export Development Council	\$1,940,000
U.S./South Africa Trade Association	\$150,000
U.S. Surimi Commission	\$270,000
U.S. Wheat Assoc. Inc.	\$440,000
Washington State Apple Commission	\$3,420,000
Western U.S. Agricultural Trade Association	\$4,020,000
Wine Institute	<u>\$4,950,000</u>
SUBTOTAL	\$96,370,000

EXPORT INCENTIVE PROGRAMS

Citrus (EIP)	\$2,600,000
Corn, Processed (EIP)	\$430,000
Wine Beverages (EIP)	<u>\$100,000</u>
EIP SUBTOTAL	\$3,130,000
Reserved by CCC for Evaluation Projects	<u>\$500,000</u>
GRAND TOTAL	\$100,000,000

Please note that fiscal year 1995 data not available.

"GREENBOX" PROGRAMS

Question. During Congressional consideration of the Uruguay Round implementing legislation, the Administration made a commitment to increase the program levels of "greenbox" and other GATT-consistent export promotion programs by \$600 million during the next five years to take full advantage of the market-opening benefits of that agreement.

Do you consider any other programs, aside from those you have identified in the fiscal year 1996 budget, as "greenbox" programs?

Answer. With respect to the Foreign Agricultural Service, the FY 1996 "greenbox" proposal includes most allowable "greenbox" activities with the exception of some food assistance authorities. From a Departmental perspective, there may well be activities proposed in other agency budgets, ARS, CSREES research for example, that are considered GATT-consistent but not included in the "greenbox" proposal.

Question. I note that a new \$25 million Alternative Agricultural Research and Commercialization (AARC) program is included in the Administration's fiscal year 1996 "greenbox" proposals. The budget justification indicates that this loan program is requested for the purpose of cooperating with the Foreign Agricultural Service in the development of alternative products for commercialization in targeted foreign markets.

Mr. Schumacher, can you tell us what the Foreign Agricultural Service's involvement in this new loan program will be?

Answer. The Foreign Agriculture Service (FAS) is currently coordinating efforts with the AARC Center to develop international markets for alternative agriculture products and to increase the dialog between the U.S. and the international community on trade issues affiliated with alternative agriculture products. With respect to the "greenbox proposal" for AARC, FAS would assist in the development of both guidelines and an implementation plan for use of "greenbox" funds. FAS would play an active role in trade policy negotiations concerning commercialization of alternative

use products. Additionally, FAS could provide technical and administrative support of R&D efforts necessary to export alternative use products. By organizing trade missions and exhibitions of alternative use products, FAS could assist the AARC Center in promoting U.S. products internationally.

FOREIGN AGRICULTURAL SERVICE OVERSEAS OFFICES

Question. Mr. Schumacher, you indicate in your testimony that because of constant budgets over the past three years, you have reduced staffing, lowered operating costs, and closed seven overseas offices to offset mandatory increases. You indicate that you have just closed the Agricultural Trade Office in London because of higher overseas wage and price increases. Which other overseas offices have been closed over the past three years?

Answer. In addition to the Agricultural Trade Office in London, over the past three years we also closed the Agricultural Trade Office in Caracas and our Agricultural Attache Offices in Panama City, Berlin, Izmir (Turkey), Lima, and Algeris. These office closures, as well as other overseas cost reduction initiatives, were undertaken to offset unavoidable overseas wage and price increases as well as to expand our presence in more promising markets and meet changing market opportunities. In the case of Lima and Algeris, security concerns were also a factor in our decision.

CCC EXPORT CREDIT

Question. This fiscal year 1996 budget proposes two new credit guarantee activities as part of the GSM-102 program, a \$100 million supplier credit guarantee program and a \$100 million facilities financing guarantee program. Both proposals are identified to be components of the Administration's "greenbox" proposals. Would you please explain more specifically how each of these proposed credit guarantee programs will work.

Answer. We will provide a detailed explanation of these programs for the record. It should be noted that the President's budget identifies only supplier credit guarantees as part of the "greenbox" proposals. This is because facility financing guarantees have been authorized since that 1990 Farm Bill was enacted, and they were not deemed a "new" or "expanded" activity in line with the Administration's commitment to expand so-called "greenbox" activities.

[The information follows:]

FACILITY CREDIT GUARANTEE PROGRAM

Under our current plans for the Facility Guarantee Program (FGP), the Commodity Credit Corporation (CCC) will provide payment guarantees to facilitate the financing of U.S. capital goods and services for the improvement or establishment of agriculture-related facilities in emerging democracies. USDA will target countries where imports of U.S. agricultural commodities are constrained due to the shortage of adequate handling, storage, and processing facilities.

The USDA will issue FGP payment guarantees covering credit periods of up to ten years when it is determined by the Secretary that the establishment or improvement of facilities will primarily promote the export of U.S. agricultural commodities.

The FGP will operate under a new subpart C of the regulations that govern the Export Credit Guarantee Program (GSM-102) and the Intermediate Export Credit Guarantee Program (GSM-103). Like GSM-102/103 guarantees, the FGP guarantee will be an agreement by CCC to pay the U.S. exporter (defined as a "U.S. person" in the regulations) or the exporter's assignee, an amount not to exceed the guaranteed value of the exported U.S. goods or services, plus eligible interest, in the event that the foreign bank issuing the letter of credit or related obligation in connection with the export sale fails to pay.

However, because FGP guarantees involve exports of capital goods and services, they will be issued in conformity with the Arrangement on Guidelines for Officially Supported Export Credits of the Organization for Economic Cooperation and Development (OECD). Importers must, therefore, provide a minimum cash payment equal to 15 percent of the value of the transaction. Principal must be paid in semi-annual installments and maximum repayment terms are determined by the classification of the recipient country under the Agreement.

Procedures. CCC will consider an application for a payment guarantee only after receipt of an application fee, and only in connection with a firm export sale of U.S. goods and/or services where payment will be made under an unconditional U.S. dollar-denominated letter of credit issued by a foreign bank acceptable to CCC.

The exporter may assign the right to proceeds under the importer obligation to a U.S. bank or other financial institution in order to realize the proceeds of the sale prior to the deferred payment date(s) in the letter of credit or related credit obligation.

Coverage. CCC plans to initially offer 95 percent coverage for the value of U.S. content (excluding the minimum 15 percent cash payment) and a portion of the interest on covered principal. Levels of coverage may later be changed, based on CCC's experience in administering the program. The USDA will not consider projects where U.S. content represents less than 50 percent of total contract value.

Fees. Guarantee fees will be comparable to the total of commitment and guarantee fees that would be charged by the Export-Import Bank of the United States for similar guarantees and projects.

Program Administration. The FGP will be administered by program announcements, country invitations, and notices to participants issued by CCC. It will be under the general administrative responsibility of the

General Sales Manager (GSM), Foreign Agricultural Service (FAS/USDA). Financial management of the program will be performed by the Office of the Controller, CCC.

THE SUPPLIER CREDIT GUARANTEE PROGRAM

The Supplier Credit Guarantee Program is being developed as a variant of the Export Credit Guarantee Program (GSM-102). It is intended to expand U.S. agricultural exports by making available payment guarantees to encourage U.S. exporters to extend financing ("supplier credits") not to exceed 180 days to importers of U.S. agricultural commodities. By contrast, under GSM-102, CCC guarantees repayment of credits extended to foreign banks which have issued letters of credit as means of payment for imports of U.S. agricultural commodities.

The SCGP payment guarantee is an agreement by CCC to pay the exporter, or the U.S. financial institution that may take assignment of the exporter's right to proceeds, specified amounts of principal and, where applicable, interest due from, but not paid by, the importer.

The SCGP may be helpful in countries where GSM-102 financing is limited because CCC has reached its exposure limits for private foreign banks and buyers need different credit options to finance the purchase of U.S. commodities. It may also be helpful in exporting value-added products where supplier credits are normally extended for 180 days or less, and the buyer and U.S. exporter wish to avoid the cost and formalities of opening a foreign bank letter of credit as a means of payment. However, the U.S. exporter must be willing to assume a higher share of risk because CCC anticipates offering a substantially lower rate of coverage than that currently offered under GSM-102 (98% of principal).

The SCGP will operate in a manner which will not interfere with markets for cash sales.

Procedures. CCC will consider an exporter's application for a payment guarantees only in connection with an export sale of U.S. agricultural commodities where the payment will be made under an unconditional and irrevocable importer obligation, payable in U.S. dollars, to the U.S. exporter.

The exporter may assign the right to proceeds under the importer obligation to a U.S. bank or other financial institution in order to realize the proceeds of the sale prior to the deferred payment date(s) in the obligation.

Coverage. The SCGP payment guarantee will cover a portion of losses resulting from defaults, whether for commercial or noncommercial reasons, by the importer under the importer's obligation. CCC may limit its exposure to individual importers.

Program Administration. The SCGP will be administered by Program Announcements and Notices to Participants issued by CCC. It will be under the general administrative responsibility of the General Sales Manager (GSM), Foreign Agricultural Service (FAS/USDA). Financial management of the program will be carried out by the Office of the Controller, CCC.

CCC EXPORT CREDIT

Question. I note that the \$200 million total program level proposed for the new supplier credit and facilities guarantee programs is being offset by the elimination of the emerging democracies guarantee program. Why are you proposing that the program of credit guarantees for emerging democracies not be continued in fiscal year 1996?

Answer. There are two principal reasons why we feel that a separate credit guarantee program for emerging democracies no longer is necessary. First, the provisions of the 1990 FACT Act which mandate that CCC make available export credit guarantees for emerging democracies expire at the end of fiscal 1995. Secondly, for all intents and purposes, those GSM-102 participants who could be termed "emerging democracies" are indistinguishable from the others in terms of the standards to which they are held. There is ample room within the regular GSM-102 program for them to continue their participation.

PROPOSAL TO CONSOLIDATE FOREIGN AID

Question. Senator Helms has proposed that the Agency for International Development, United States Information Agency, the Arms Control and Disarmament Agency, and the Foreign Agricultural Service and the Foreign Commercial Service be consolidated with the State Department to create a new International Development Foundation.

What is your reaction to moving the functions of the Foreign Agricultural Service to the State Department and consolidating them with those of these other agencies?

Answer. As discussions and debate regarding the transfer of FAS back to the State Department arise, it is important to keep in mind the original impetus for transferring the agricultural attaches to FAS from the Department of State in 1954. The driving force behind this move was "to sharpen the effort to find new world markets for our agricultural products," according to President Eisenhower. Agricultural exports and trade policy were growing in importance. Similarly, foreign agricultural developments were having an ever-growing impact on domestic farm program decisions. These two trends required a focused, closely coordinated foreign agricultural authority within USDA. The reasons for the transfer 41 years ago are even more relevant today, when agricultural exports play such a crucial role in the farm and agribusiness industries and are so closely linked to the administration of our domestic farm policies and programs.

QUESTIONS SUBMITTED BY SENATOR GORTON

FARM BILL RECOMMENDATIONS

Question. Clearly subsidies, price supports and farm programs will be thoroughly examined during the reauthorization of the Farm Bill.

In lieu of this reality, how is the Administration proposing to reform programs like MPP, EEP, PL-480, and the like -- in its recommendations to Congress?

Answer. It is this very reality that we are considering in developing ideas for the next Farm Bill. While we have already made some changes, such as the recent improvements in the MPP regulations, we are considering additional changes. Since our deliberations are still continuing, I cannot at this time provide any specifics. We are looking at these programs to identify ways to better achieve our marketing goals. Any such changes would, of course, comply with our GATT commitments but would also better serve our exporters and their customers. I would expect that within the next several weeks the Administration will be providing its ideas on the 1995 Farm Bill to members of Congress and the public.

INCREASE IN EXPORT SALES ATTRIBUTABLE TO MARKET PROMOTION PROGRAM

Question. According to your staff, every \$2 in MPP funds produces nearly \$16 in export sales -- according to my numbers this is an increase of \$9 in export sales from last year.

What caused this increase in export sales?

Answer. For every federal dollar invested in MPP and TEA activities between 1986-1992, exports have risen 16 dollars, substantially higher than our previous estimate of 2-7 dollars. This latest estimate is based on a recent FAS staff study of MPP's effectiveness in boosting high-value agricultural exports which account for 70-75 percent of the program. Using this measure, as well as a number of others, the study concludes that MPP has been more effective than previously thought.

There are two main reasons for the higher estimate: 1) our latest estimate includes four more years of MPP (and TEA) data to evaluate and 2) the new estimates are based on a more powerful analytical methodology that separates out MPP's impacts on exports as distinct from impacts attributed to the lower dollar, trade liberalization, and rising incomes around the world. Furthermore, this new methodology allows us to estimate both the long run and short run impact of MPP's export promotion effect whereas the previous estimate only measured short run impacts. This is especially significant because the study concludes that MPP's long run impact in boosting U.S. competitiveness and exports is three and a half times greater

than the short run impact. This is consistent with the views of many of our participants who have urged patience in evaluating results since the full benefits of export promotion are realized over a longer period of time. Boosting foreign demand takes time but it does work.

Question. As a result of GATT, we will need to reform and modify current programs to meet the guidelines of the agreement. Why is the Administration proposing to modify programs that are not GATT legal?

Answer. The United States does not have any agricultural programs that are inconsistent with the GATT. In the case of our export subsidy programs they will be reduced over a 6-year period but not eliminated. The Uruguay Round Implementing Legislation has already brought all U.S. agriculture programs into conformance with the Agreement on Agriculture and the WTO. The Administration intends to ensure that the new Farm Bill will also be in conformance with our international obligations. One potential problem, however, would be if Congress does not pass a Farm Bill and we revert to permanent legislation. This would almost certainly break our WTO commitment regarding the ceiling level of internal support the U.S. Government provides U.S. agriculture.

Question. Under GATT the use of export subsidies has been reduced -- not eliminated. This means that the European Union (EU), which out-spent the U.S. by 6 to 1 over the past 5 years in terms of export subsidies, will be able to more than maintain its historical advantage.

What existing programs, new programs or modified programs does the Administration see as tools to keep U.S. agriculture competitive in the international marketplace?

Answer. First of all, we are more competitive than the EU. We produce our agricultural commodities at lower costs. The Administration plans to use all of our available export tools to ensure that U.S. agriculture remains competitive in world markets. We plan to use our direct export subsidy programs (EEP, DEIP, SOAP, COAP) at the full level allowed under the Uruguay Round Agreement and U.S. law. We also plan to aggressively use the Market Promotion Program and the Cooperator program to help increase U.S. competitiveness. We will continue to use our GSM credit guarantee programs and are looking into ways to modify them to more effectively compete in today's markets. For example, modifications enabling credit guarantees to foreign importers rather than just to foreign banks should make the program more competitive in many markets by ensuring that there is more incentive for importers to purchase U.S. agricultural goods. We will also continue to have significant food assistance programs.

MPP LABELED AS "CORPORATE WELFARE"

Question. This week, two articles from both the Washington Times and the Washington Post targeted cuts in export programs. Programs like MPP

have been labeled as "corporate welfare." One article stated that MPP provides subsidies to McDonald's, Haagen-Dasz, and Campbell Soup Co., to name a few, to promote and advertise their products overseas.

What is the Administration doing to make sure that our export programs -- which account for nearly one-third of total U.S. agriculture production, over \$40 billion in sales and provide more than one million Americans with needed jobs -- are not mislabeled?

Answer. The Department recognizes that it must address public concerns and criticisms regarding the participation of multinational firms in MPP. To that end, the Department has taken aggressive steps to counter the adverse publicity, including direct contact with the "grass-root" constituents in rural America and vigorous attempts to better communicate the benefits of the MPP, particularly quantifiable benefits of company participation. In addition, extensive efforts have been made to explain the overall benefits to the U.S. economy.

The Department's rationale for providing export promotion assistance to large corporations is based on the impact these firms have on agricultural export numbers. Large corporations are in the best position to move the volumes required to meet the Department's export goals. However, as a result of the Omnibus Budget Reconciliation Act of 1993, the Department is committed to providing more support to small-sized firms.

Question. In business, if you do not meet the competition, you will not remain in business very long. What are other countries doing -- especially the European Union -- in support of their agricultural sector and to maintain and expand their share of the world market?

Answer. We expect other countries to aggressively use their export tools, which is why it remains imperative that we also aggressively use our export and market development programs. The European Union is currently in the process of determining how it will specifically implement its Uruguay Round commitments. European Union member states will continue to actively support market development efforts. Other exporting countries are also trying to increase their market shares. Available information shows that recent expenditures on market promotion activities by eleven major agricultural exporting nations totaled nearly \$500 million annually. Types of promotions undertaken by these countries, as well as the source of funding, vary considerably. For example, some of these countries rely on direct government appropriations while others use mandatory producer levies or check-off programs.

Question. It has been suggested that the EU and other foreign competitors will continue to use every available weapon as allowed under GATT - including maximizing the use of export subsidies and shifting more resources into other GATT-allowable programs such as Market Development and Promotion, Export Credits, and Food Assistance. Do you share that view?

Answer. Yes, we are convinced that other countries will continue to use resources to increase their competitiveness, and that is why we feel it is critically important that we use all of the export and market development tools available to U.S. agriculture to meet and beat that competition. The Administration has committed to using our export subsidy programs to the maximum allowed by the WTO and U.S. law. Moreover, we plan to aggressively use the Market Promotion Program, the Foreign Market Development Program, GSM credit guarantees and our other tools to ensure that U.S. agriculture remains as competitive as possible.

Question. What strategy does USDA have in order to help U.S. Agriculture compete effectively in the international marketplace and to capitalize on any market opportunities as a result of GATT?

Answer. The Administration plans to aggressively use all available export tools to help U.S. agriculture compete in international markets. For example, we plan to use our direct export subsidy programs to the maximum extent allowed under the Uruguay Round agreement and U.S. law. We also plan to aggressively use the Market Promotion Program and the Cooperator program to increase our competitiveness. We will also aggressively use the GSM credit programs to help U.S. exporters compete in the international market. The Administration will also closely monitor the implementation of the Uruguay Round to ensure that other countries fully implement their commitments. We will aggressively use the new WTO dispute settlement procedures in cases where these commitments are not fully implemented.

SUCCESS OF MARKET PROMOTION PROGRAM

Question. What has been the success of the Market Promotion Program and how is it important to expanding U.S. trade and creating jobs?

Answer. Evaluating the effectiveness of export promotion and market development activities under both the Foreign Market Development program and the Market Promotion Program (MPP) is difficult. Many factors affect exports, and they are different for bulk products and consumer oriented products. Bulk exports tend to sell largely on the basis of price, while consumer-oriented products, which can be differentiated, tend to sell based on such factors as quality, appearance, and image.

Evaluation studies attempting to measure the effects of promotion on exports have focused on specific commodities or small groups of commodities in selected countries. Recent analytical efforts have focused on high-value consumer-oriented products since about 80 percent of MPP funds are used to promote these products, and because exports of bulk and intermediate products are more likely to be affected by other export programs (e.g., CCC export credit guarantee and export enhancement programs).

One recent study performed by the Foreign Agricultural Service, "Evaluating The Effectiveness of the Market Promotion Program on U.S.

High Value Agricultural Exports", attempted to improve performance measurement by using a different analytical approach. Rather than trying to identify increases in exports attributable to market promotion, changes in market share were quantified. In brief, the study concluded that export promotion activities were responsible for roughly 60 percent of the change in market share, with the rest due to the change in the value of the dollar. The net result was that for every dollar spent on export promotion since inception of the Targeted Export Assistance Program in 1986, exports rose sixteen dollars, and almost 75,000 jobs nationwide and \$9 billion in direct and supporting economic activity were supported by MPP's success in boosting U.S. high value agricultural exports as of 1992.

FUNDING INCREASE FOR THE MARKET PROMOTION PROGRAM

Question. The President's budget calls for a \$24.5 million increase in funding for the Market Promotion Program for this year, which would increase its level of funding from a current level of \$85.5 million to its full authorized level of \$110 million. It also recommends full funding of MPP for FY 1996.

How would such increased funds be utilized?

Answer. The Department believes there is a direct relationship between program funding and the level of U.S. agricultural exports. In turn, there is a corresponding impact on U.S. producer incomes as well as jobs and incomes in the commodity processing and transportation sectors. Increased funding would allow:

- greater program participation by nonprofit trade organizations and small to medium-sized firms;
- organizations to target new and emerging markets and pursue market development programs in the developing world;
- organizations to increase representation in overseas markets, thereby improving our ability to compete against the market development efforts of competitors such as the EU; and
- organizations to undertake a broader spectrum of promotional activities ranging from technical assistance to television advertising.

FOREIGN MARKET DEVELOPMENT PROGRAM

Question. USDA's Foreign Market Development Program has been another effective tool in helping U.S. agriculture build, maintain, and expand export markets. Last year, Congress directed that FAS use existing carry-over funds in order to ensure adequate funding. What is the status of the current program and level of funding --and-- what impact would the President's budget proposal have on this program?

Answer. As directed by the Congress, funding for Cooperator marketing plans for fiscal year 1995 was maintained at fiscal year 1994 levels by drawing down carry-over funds. Assuming approval of the budget proposal, Federal funding for Cooperator marketing plans will be reduced by 20 percent for fiscal year 1996. Retargeting Cooperator resources to areas with the greatest growth and an increased cost-share level will allow the program to maintain continued assistance at the same levels.

Question. What specific changes have been made to reform MPP?

Answer. As a result of the Omnibus Budget Reconciliation Act of 1993 and recent legislation implementing the GATT Uruguay Round Agreement, the following changes have been made to the MPP:

- U.S. exporters no longer need to show that a U.S. agricultural commodity faces an unfair trade practice in an overseas market;
- Small businesses seeking MPP funds receive priority assistance;
- Program assistance for the promotion of brand products in a single country is generally limited to no more than five years;
- Program participants are required to contribute no less than 10 percent of CCC resources for generic promotions;
- Program participants are required to certify that program assistance will supplement, but not supplant, any private or third party funds or other contributions to program activities;
- Program participants may be required to contract for an independent evaluation or audit of program activities using their own funds.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

FUNCTIONS AND SERVICES OF AGRICULTURAL POLICY

Question. I have long heard farmers' complaints that too much of U.S. agricultural policy is shaped by the State Department and that farmers often feel they are little more than tools of U.S. foreign policy. Can you provide your views as to why the Department of Agriculture is properly suited to provide the functions and services of FAS rather than turning them all over to the State Department?

Answer. It is my opinion that the interest of U.S. agriculture are best served by FAS retaining its corps of agricultural attaches. International trade plays a crucial role in the economic well being of rural America. The production from approximately one out of every four acres of agricultural cropland is exported. Often a large sale to a foreign market will result in immediate increases in the farm prices of the commodity involved. The

obvious linkages between domestic agriculture and foreign trade make it critical for the Department of Agriculture to retain its foreign service arm. The current arrangement permits the Department of Agriculture to play an appropriate role in formulating foreign policy that impacts on the U.S. farm community. It was President Eisenhower who in 1954 said that this move (agricultural attaches to USDA) was "to sharpen the effort to find new world markets for agricultural products." The same forces that caused the move still exist today.

FOREIGN CURRENCY PROGRAM

Question. Can you provide an update on the activities of the FAS Foreign Currency Program?

Answer. USDA uses U.S. owned foreign currencies to support collaborative research in the agricultural sciences on problems of significant interest to the U.S. and the participating foreign country. Since the program's inception in 1958, over 2,400 research projects have been carried out in 40 nations.

Currently, the Foreign Currency Research program has a total of 78 active research projects in India, Pakistan, Poland, and Taiwan with an equivalent value of 7.5 million dollars. Research topics of major importance to U.S. agriculture include: identification, management and control of exotic animal and plant diseases; integrated pest management; genetic diversity; biochemistry and microbiology; groundwater pollution, nitrate and pesticide build-up in watersheds, and acid rain deposition.

QUESTIONS SUBMITTED BY SENATOR HARKIN

AGRICULTURAL TRADE OFFICES

Question. Could you explain the functions of the Agricultural Trade Offices and why the planned expansion locations were chosen?

Answer. The functions of the Agricultural Trade Offices were defined in the Agricultural Trade Act of 1978. They are:

- Increase the effectiveness of agricultural export promotion efforts through consolidation of activities, providing services and facilities for foreign buyers and United States trade representatives, and coordination of market development activities sponsored by the Department of Agriculture;
- Establish goals by nation or region and agricultural commodity for developing, expanding, and maintaining markets for United States agricultural commodities;
- Initiate programs to achieve the export marketing goals approved by the Department of Agriculture;

- Maintain facilities for use by nonresident cooperators, private trade groups, and other individuals engaged in the import and export of United States agricultural commodities where the use of such facilities would aid in the conduct of market development activities, and cooperate to the maximum extent practicable with such cooperators, groups, and individuals to expand the level of United States agricultural exports;

- Develop and maintain a current listing of trade, government, and other appropriate organizations for each agricultural commodity area and make such listing available to persons with a bona fide interest in exporting or importing United States agricultural commodities;

- Originate and provide assistance for exhibits, sales teams, and other functions for the promotion of United States agricultural commodities;

- Provide practical assistance for the use of the programs under the Agricultural Trade Development and Assistance Act of 1954, and related programs of the United States Government where use of such programs will serve as a market development tool for the United States agriculture;

- Supervise project agreements with United States Cooperators, coordinate the activities of the United States Agricultural Trade Office with those of the cooperators, and submit annual recommendations to the Secretary of Agriculture on the efficacy of cooperator programs;

- Publicize the services offered by the United States Agricultural Trade Office through advertisements in trade journals or by other appropriate means; and

- Perform such other functions as the Secretary of Agriculture, in consultation with the Secretary of State, determines to be necessary and proper for achieving the purposes of this subtitle.

The Act directed the Secretary of Agriculture, in consultation with the Secretary of State, to establish not less than 6 nor more than 25 U.S. Agricultural Trade Offices. Over the years FAS has looked at the changing world market opportunities in determining the location for the Agricultural Trade Offices. In March 1995, 12 Agricultural Trade Offices covering 15 countries are operational.

As outlined in the Explanatory Notes accompanying FAS' budget submission, FAS recommends opening 6 new ATOs in Shanghai, China; Sao Paulo, Brazil; Moscow/St. Petersburg, Russia; Durbin, South Africa; Abidjan, Cote d'Ivoire, and the Caribbean and expanding 2 others in Hamburg, Germany and Mexico City, Mexico. With improved levels of market access and expanding middle class purchasing power, market opportunities for U.S. exports to these regions of the world will increase. Capitalizing on these new market opportunities requires consolidation and coordination of market development activities. The potential for improving the marketing of

American food and fiber products in these countries can be significantly influenced by the ongoing activities of U.S. Agricultural Trade Offices.

Question. Are the Agricultural Trade Offices entirely government funded or is there some kind of private sector contribution?

Answer. The Agricultural Trade Offices are entirely government funded.

Question. How are the activities of the Agricultural Trade Offices similar to, different from or complementary to the work of cooperators under the Foreign Market Development program?

Answer. The scope of work of the ATO is much broader than that of the Cooperators because it encompasses the overall agricultural trade of the United States. The Cooperators represent either commodity specific or regional interests. The Agricultural Trade Offices coordinate the functions of all cooperators in their country or countries of responsibility. The Cooperators individually or collectively join in activities organized by the ATO to present a "National" image to complement several products or interests in the foreign markets. Cooperators may also use ATO facilities without contributions, therefore increasing their overall resources. The ATOs offer advice and assistance to the cooperators in planning and implementing Cooperator activities. The ATOs evaluate Cooperator "strategic" plans prior to the approval and funding of cooperator marketing plans.

COOPERATOR PROGRAM

Question. What are the sources of funding for the cooperators' activities in the Foreign Market Development program, and how much of the total budget for those activities comes from outside sources?

Answer. The sources of funding for the Foreign Market Development (FMD), also known as the Cooperator Program, are: 1) appropriated funds, and carry-over funds which were \$38 million for program year 1993 and \$34.4 million for program year 1994, 2) U.S. non-profit association (Cooperator funding) which includes U.S. industry funding, which totaled \$22.7 million in 1993 and 25.8 million in 1994, and 3) foreign third party funding, which totaled \$6.8 million in 1993, and \$8 million in 1994.

BALANCE BETWEEN VALUE-ADDED AND BULK EXPORTS IN ALLOCATION OF RESOURCES

Question. I have supported efforts to increase our U.S. exports of value-added agricultural exports, but I also know that bulk exports continue to make an important contribution to our U.S. exports.

Does your agency try to strike a balance between high-value and bulk commodity exports in allocating its resources?

Answer. Recognizing the significant differences in product characteristics and markets for bulk and value-added agricultural products, the Foreign Agricultural Service goes to great lengths to ensure that there is equity across export program areas, and that all U.S. agricultural products are adequately represented in export markets and sufficiently supported by U.S. programs.

Question. If so, how do you go about reaching that balance?

Answer. The Department attempts to reach a balance between high-value and bulk commodity exports in allocating its resources through the administration of the foreign market development programs for agricultural products. Program records show that roughly eighty percent of funding of the Market Promotion Program is provided to organizations or companies which promote high-value agricultural products, while slightly more than eighty percent of funding from the Foreign Market Development program is provided for the promotion of bulk commodities. In addition to these two programs, the Department also provides export assistance to all qualifying U.S. agricultural products through the Export Credit Guarantee and the Export Enhancement programs.

REDUCED FUNDING FOR THE COOPERATOR PROGRAM

Question. How do you expect the planned reduction in funding for the Foreign Market Development program, which I understand is from \$33 million to \$22 million, to affect the activities of the cooperators?

Answer. Although prompted by the need to reduce government spending, the underlying philosophy and motivation behind the roughly \$10 million reduction in the Cooperator program is to stimulate increases in private sector contributions. The concept, therefore, is not that total funding is reduced, but rather the private sector will shift a greater portion of their resources into export-related activities.

Question. Will that reduction of funds for the Foreign Market Development program make it harder to reach your stated goal of \$65 billion in agricultural exports by the year 2000?

Answer. The Department believes that there is a relationship between program funding and the level of U.S. agricultural exports. The effects of reductions in the Federal contribution to the Foreign Market Development program hopefully can be offset by increased contributions by the private sector and by targeting program activities to those areas where export potential is the greatest.

Question. What role would you estimate the Foreign Market Development program has played in reaching the record level of \$48.5 billion in agricultural exports in fiscal 1995?

Answer. Evaluating the effectiveness of international marketing activities or programs is difficult, as many factors including marketing activities affect exports. However, history has shown that a long-term commitment, in terms of both financial and human resources, is important to sustained growth in agricultural exports. While difficult to quantify, it is clear that the FAS' long term market development program, the Foreign Market Development program, has had a significant positive impact upon agricultural exports. In the absence of the long term Foreign Market Development program, the following could be expected:

- lower budgets for technical assistance and trade servicing activities overseas;
- the primary focus of long-term market development programs for bulk commodities and intermediate products;
- inability to pursue/undertake new market development programs or adjust to changing market opportunities;
- reduced representation in overseas markets which will affect our ability to compete against the market development efforts of competitors such as the EU;
- inability to entertain funding requests for new commodity groups interested in pursuing a foreign market development program;
- fewer agricultural commodities receiving assistance or, if necessary, to drop current Cooperators from the program; and
- inability to fund special events or programs, for example special trade missions and trade shows.

QUESTIONS SUBMITTED BY SENATOR BURNS

FOREIGN MARKET DEVELOPMENT

Question. Last year, the Congress decided to provide funding for the Foreign Market Development (FMD) program through a regular appropriation and a drawdown of the program's forward funding account. What is the state of the FMD program's forward funding account? If Congress is late in approving the fiscal year 1996 appropriations bill, what will happen to overseas cooperator programs? Could your answer reflect both long and short-term effects?

Answer. As directed by the Congress, funding for Cooperator marketing plans for fiscal year 1995 was maintained at fiscal year 1994 levels by drawing down unprogrammed balances, or forward funding. We estimate that unprogrammed balances going into fiscal year 1996 will be approximately \$15.4 million, a reduction of \$10 million from the beginning of fiscal year 1995.

ATO'S IN LATIN AMERICA AND ASIA

Question. The President's Economic Report to Congress confirms that the markets in Latin America and Asia are growing faster than those of our

traditional export markets. In fact, Asian and Latin American economies are expected to grow more than twice as fast as Europe and Japan. What is FAS doing to promote exports in these emerging markets? I am interested in the amount of money being spent for Agricultural Trade Offices in markets that are facing the amount of growth seen in some of the emerging markets. Could you comment on this strategy and the amount of money you intend to spend?

Answer. FAS believes strongly that the markets of Latin America and Asia hold great potential for expanded U.S. agricultural exports. Our budget request includes funds to expand our ATOs in the two regions.

I will provide the locations of existing ATOs in the two regions along with their staffing and fiscal year 1995 budgets, plus our proposed expansions for 1996.

[The information follows:]

COUNTRY	CITY	AMERICAN OFFICER(S)	FOREIGN NATIONALS	FISCAL YEAR 1995 BUDGET
CHINA	BEIJING	1	2	166,495
	GUANGZHOU	1	3	196,859
HONG KONG	HONG KONG	2	4	676,110
JAPAN	TOKYO	2	5	2,017,750
	OSAKA	1	3	1,266,910
KOREA	SEOUL	1	5	689,461
MEXICO	MEXICO CITY	1	4	762,100
SINGAPORE	SINGAPORE <u>1/</u>	2	3	739,521
TAIWAN	TAIPEI	1	3	300,000 <u>2/</u>

1/ Also covers Brunei, and Papua New Guinea and services the agricultural marketing requirements in Indonesia & Philippines.)

2/ This office is funded by FAS through a reimbursable agreement with the American Institute for Taiwan. The 1995 costs for this office have not yet been finalized but are estimated to be \$300,000.

We are requesting funds for the following ATO expansions in these regions.

Shanghai, China	Open New ATO	\$195,000
Mexico City, Mexico	Expand Existing ATO	\$217,000
Sao Paulo, Brazil	Open New ATO	\$445,000

ROLE OF AGRICULTURAL TRADE OFFICES

Question. What does an ATO do and is there a role for the private sector?

Answer. The functions of the Agricultural Trade Offices were defined in the Agricultural Trade Act of 1978. The scope of work of the ATO is broad and encompasses the overall agricultural trade of the United States. The ATO provides assistance for exhibits, sales teams, and other functions for the promotion of United States agricultural commodities; develops, maintains and disseminates a current listing of trade, government, and other appropriate organizations for each agricultural commodity area to facilitate the trade of United States agricultural commodities; supervises project agreements with United States Cooperators; coordinates the activities of the United States Agricultural Trade Office with those of the cooperators; and submits annual recommendations to the Secretary of Agriculture on the efficacy of cooperator programs. The ATO increases the effectiveness of agricultural export promotion efforts through consolidation of activities, providing services and facilities for foreign buyers and United States trade representatives, and coordinating market development activities sponsored by the Department of Agriculture.

Virtually all of the work of the ATO is aimed at assisting the private sector by carrying out functions within the country that only a government entity can perform, such as intervening with the host governments to prevent or remove government imposed barriers to U.S. exports or overseeing the expenditure of U.S. government funds by Cooperators for market development activities. These functions do not lend themselves to being performed by the private sector. The major objective of ATOs is to complement, not duplicate, the activities of the private sector.

PROMOTING BULK AGRICULTURAL EXPORTS

Question. Bulk agricultural exports constitute the backbone of total U.S. exports. Since bulk exports are largely promoted through the foreign market development program, your budget appears to de-emphasize these exports. Is this correct? What are your plans for continuing to build markets for wheat and other bulk commodities?

Answer. We are not de-emphasizing the export of bulk commodities. The fiscal year 1996 request for the FMD calls for an increase over the level appropriated in fiscal year 1995. Moreover, the FMD program is not the only tool available to us to promote exports of bulk commodities. Commercial exports of bulk commodities are also heavily promoted under the Market Promotion Program (MPP), the Export Enhancement Program (EEP), and the Export Credit Guarantee Programs. For the MPP, we are proposing to fund the program at its fully authorized level in 1996 and for the EEP we are seeking funding at the maximum level authorized by our international commitments. The budget provides a 1996 program level for CCC export credit guarantees which is unchanged from the current year.

Question. What is the Federal/State Market Improvement Program (FSMIP) program? How much of this money goes for trade shows and missions? Is this the best commitment of our limited resources for export promotion?

Answer: The Federal-State Market Improvement Program (FSMIP) provides matching funds to State Departments of Agriculture for projects directed toward improving the marketing of farm products with local marketing systems.

As proposed in the President's Budget, the Foreign Agricultural Service will work in collaboration with the Agricultural Marketing Service in developing projects designed to expand the predominately domestic focus of producers to the international market place. Project activities will include development of innovative marketing techniques to seek outlets for farm products in the international market place and improving State expertise in providing services to encourage marketers into the export market. These activities could include trade shows and missions; however, related funding levels remain to be determined.

We view the FSMIP as an important, yet inexpensive tool that will effectively develop interest and awareness of the opportunities the export market offers.

SUBCOMMITTEE RECESS

Senator COCHRAN. Our next hearing is going to be held on Wednesday, March 22, 1 week from today, in this room at 10 a.m. We will hear then from witnesses for the Natural Resources Conservation Service budget for 1996.

Until then, the subcommittee stands in recess.

[Whereupon, at 12:05 p.m., Wednesday, March 15, the subcommittee was recessed, to reconvene at 9:45 a.m., Wednesday, March 22.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

WEDNESDAY, MARCH 22, 1995

**U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, DC.***

The subcommittee met at 9:45 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.
Present: Senators Cochran and Kerrey.

DEPARTMENT OF AGRICULTURE

**STATEMENT OF JAMES LYONS, UNDER SECRETARY, NATURAL RE-
SOURCEs AND ENVIRONMENT**

ACCOMPANIED BY STEPHEN B. DEWHURST, BUDGET OFFICER

NATURAL RESOURCES CONSERVATION SERVICE

STATEMENT OF PAUL W. JOHNSON, CHIEF

ACCOMPANIED BY:

PEARLIE S. REED, ASSOCIATE CHIEF

**THOMAS A. WEBER, ACTING DEPUTY CHIEF, NATURAL RESOURCE
PROGRAMS**

**RICHARD L. DUESTERHAUS, DEPUTY CHIEF, SOIL SCIENCE AND
RESOURCE ASSESSMENT**

**ROBERT K. REAVES, ACTING DIRECTOR, BUDGET PLANNING AND
ANALYSIS DIVISION**

OPENING REMARKS

Senator COCHRAN. The meeting will come to order.

Today we continue our hearings on the fiscal year 1996 budget for the Department of Agriculture, Rural Development, and Related Agencies. This morning we are reviewing the budget request of the Natural Resources Conservation Service. We appreciate very much the attendance of all of our witnesses, specifically Under Secretary James Lyons, Paul Johnson who is the Chief of the Natural Resources Conservation Service, and Stephen Dewhurst, the Director of the Department's Office of Budget and Program Analysis.

We have received your written statements, which we appreciate very much, and they will be made a part of the record in full. I hope you will now proceed to make any summary statements and additional comments you would like to make to the subcommittee for the record. We will then have an opportunity to ask questions and discuss the issues before the subcommittee.

PREPARED STATEMENT

Before we hear from Mr. Lyons I have a statement from Senator Burns and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BURNS

Thank you Mr. Chairman for holding this hearing today to discuss the budget for the Natural Resources and Environment Service within the Department of Agriculture. This agency controls a very large amount of land and resources in my State of Montana. The Forest Service and the Natural Resources Conservation Service have a definite impact on land ownership and land uses in my State. An impact which in recent years has had an affect on the economy in Montana and many areas throughout the Nation.

Yesterday, I listened while my colleague from Idaho, Senator Craig, told Secretary Designate Glickman that the Forest Service was a terminal case of disrepair within the Federal Government. I must admit that I share the view of my neighbor to the west. The Forest Service in recent years has been hampered by mismanagement in the forests and the lands used by the public. Too many stringent regulations have been imposed upon public land users, be they grazers or natural resource directors. Management from Washington down to the individual forest ranger districts have given in to special interest groups to enact rules and regulations which impose unreal and unnatural barriers to opening Federal lands to the public use.

In February I co-sponsored legislation with Senator Craig which will allow the natural resource managers an opportunity to improve the forest health of our Federal lands. It should not have been necessary to introduce legislation on this matter, but the management of the Forest Service has been negligent in its practice of dealing with forest health. Just last year, at the end of the unusually heavy fire season, it was estimated that it would not be until mid summer of 1996 before salvage sales could even be bid. Therefore by the time a salvage sale will be bid out, the timber being proposed for sale would be beyond reasonable salvage material. This does not assure proper forest health, nor does it support the economic development that the Department of Agriculture is called upon to provide. This lack of action has and does continue to concern me, since most of Montana is rural and dependent upon either natural resources or agricultural development.

I am also very concerned about the proposed reorganization of the Forest Service. Under Secretary Lyons and Forest Service Chief Jack Ward Thomas have proposed a reduction in the amount of regional offices staffed by the Forest Service. As a proponent of less government, I was pleased to see that the Department of Agriculture was making advances in reorganization. However, I am afraid that the National Forests and public lands will suffer under the plan as it is proposed at this time. The arguments I have heard about the reorganization, state that the plan will allow for more local intervention into the operations at the ranger district level. Now in my own State of Montana, I don't see how a Regional Forester in Denver, Colorado is going to have much local contact with a forest district or forest user in far northwestern Montana. We need to maintain and rearrange personnel in the field, not at the regional office or Washington level. Discussions have also centered around the travel between the regional offices and the Washington headquarters, another argument that does not wash with me. There should be no more travel between the headquarters in Washington than there is now, but the bulk of all travel should be focused on making contact with those people who live, work, and recreate in the forests under the authority of the Forest Service. I cannot understand how a regional forest official can relate with the needs of all the forests and land users in the region sitting in an office two States away, in an urban setting.

A direct example of the need for local interaction is happening on the Beaverhead National Forest in Montana. Several years ago a special interest group opposed to having cattle graze on Federal forest land filed a lawsuit against the National Forest Service due to the inaction of the Forest Service in meeting compliance under NEPA. This action has progressed to a point where the Forest Service has agreed to a settlement which threatens the future of the people that are grazing on and caring for the forest land in southwestern Montana. This case is being used as an example of the lack of cooperation between the people who work the land for the food and clothing base of this country and the government which is supposed to be working with them for the betterment of the forest and public lands. The work out of the regional office needs to focus on the work with the people on the land. This needs to be done to meet the requirements of law, and Federal land users. Can this

be done by a regional forester in Denver, with no understanding of the area involved? Costs alone for transportation needs for the very people government is sworn to serve would have put them out of the running in pursuing the legal answers to their problem. The Forest Service has neglected the future and the rules and regulations established to assist them in the work that they have been set apart to maintain for the public and the land.

In the past fifty years we have seen the need for a program that will assure the proper use and development of the land. At times in the past people stretched the reasonable use of the resources that the good Lord has given us to enjoy. Today the tide has turned and the people who live and use the land are the stewards of the land. They realize that their futures are tied to the land and what they are able to produce from the resources available. This cannot be done when they exploit and lay waste to the resource that they depend most upon. Government and those who guide and direct the Federal agencies need to work for and with the people they serve. In this quest they need to reduce the regulations, the paper work and increase the cooperation and hands on work with the public. What was the land in the past will never be again, yet we have been given the opportunity to make what we have better than ever before, if we open our eyes and see that the people are working for the same conclusions.

Mr. Chairman, I again would like to thank you for holding this hearing, and I look forward to the statement and comments that Mr. Lyons and his staff have for us today.

STATEMENT OF JAMES R. LYONS

Senator COCHRAN. Mr. Lyons, you may proceed and please introduce your other compatriots who are there at the witness table with you for the record.

Mr. LYONS. Thank you very much, Mr. Chairman. I will do so and point out that I will offer a summary statement for the entire group, and then we will all be available for answering questions.

With me are Mr. Paul Johnson who is the Chief of the Natural Resources Conservation Service. To my left is Mr. Pearlre Reed who is the Associate Chief of the Natural Resources Conservation Service, Mr. Duesterhaus and Mr. Weber from the Washington office staff, as well as Mr. Reaves and Steve Dewhurst, who is the captain of the budget at the Department of Agriculture, who you all know very well.

I want to thank you for this opportunity to appear before you this morning to discuss the fiscal year 1996 budget request for many of the conservation programs in USDA. I will summarize my written comments for you in the statement. Unfortunately, I cannot do justice to the detailed written submission that Chief Johnson has provided the committee, and for this reason, I would urge you to review his statement as well.

AMERICAN AGRICULTURE

Mr. Chairman, as you know, American agriculture is the envy of the world. Our productivity in food and fiber is unsurpassed and is built upon a foundation of commitment to conservation and land stewardship.

As we look at American agriculture's conservation commitment, what we are seeing is the product of a partnership that has been evolving for more than a half century. It is a partnership that bonds the Natural Resources Conservation Service with local conservation districts and private landowners, with State agencies, and other Federal departments, with the research community, and with a vast and growing number of other partners across the country.

NRCS brings to this partnership its technical expertise, good science, fairness, and flexibility, but more than that, NRCS, with its energy and ideas and commitment, brings a special bond. This is the bond of trust that NRCS stands for scientific objectivity, a commitment to a productive agriculture in harmony with a healthy land and a belief that voluntary stewardship works. Mr. Chairman, I believe we can demonstrate this across the American landscape. The value of this trust cannot be overestimated because once established, a tremendous amount of good conservation work will follow.

President Clinton made a speech last week about his regulatory reform initiative that he has directed the agencies to undertake, and he said, "The philosophy that guided these changes is pretty simple: protect people, not bureaucracy; promote results, not rules; get action, not rhetoric. Whenever possible, try to embrace common sense. It will confound your enemies and elate your friends."

There is no better example, Mr. Chairman, of the President's principles in action in the Federal Government than the conservation compliance program, and NRCS is proud to be able to report that our relationship of trust, built on our commitment of working with farmers, has helped make this program a tremendous success.

When American agriculture was asked to meet the conservation compliance requirements laid out in the 1985 farm bill, NRCS was given the lead. NRCS, working hand in glove with farmers and ranchers, developed the means for achieving the goals of the 1985 act of protecting fragile soil and reducing soil erosion in ways that protected the rights of landowners and the interests of all Americans.

Just look at what we have been able to accomplish in the last 10 years. The deadline for applying conservation practices came and went on December 31 of this past year without incident, and conservation is working. We estimate that soil loss is down more than 60 percent, saving hundreds of millions of tons of soil. We know the program could have been better, and we are anxious to work with Congress in the 1995 farm bill to achieve this, but this program demonstrates that American agriculture can take the lead and NRCS is proud to be a partner in this success story. It is this type of partnership that President Clinton is supporting in this regulatory reform program.

NRCS PARTNERSHIP

Another thing that makes the NRCS partnership unique is that it challenges landowners to think about how the natural resource issues that begin on their properties reach beyond the edges of their properties onto their neighbors' lands and into their communities as a whole. The partnership calls upon our instincts toward stewardship, toward supporting our communities and future generations that will live on this land and live in these communities.

It is critical that you understand the currency of the partnership between NRCS, the conservation districts, the private landowners, and the State and Federal agencies. In large part, it is the programs and resources that each individual member brings to it. In the case of NRCS, it is our technical assistance capabilities, our Soil Survey Program, and the cost share programs that help pay for conservation practices on the land. It is our Small Watersheds

Program, the Wetlands Reserve Program, the RC&D's and the grazing lands conservation initiative. Chief Johnson's written testimony does an excellent job of detailing the critical aspects of these programs and their relationships.

Together, Mr. Chairman, we face a tremendous challenge in developing the fiscal year 1996 budget. As Federal resources are drawn thin, we must make tough decisions regarding the future of conservation services we provide and the programs we manage. I implore you to be careful as you contemplate each of the programs and activities of NRCS because you cannot think of them in isolation. These programs are woven together in each of the States to form a fabric or a web that supports this partnership. Pulling out one of these threads puts at risk numerous other activities that are united by these systems and components. Individual components can be pulled out but not easily. We need to work closely with you as you consider the difficult decisions before the subcommittee to ensure that as much of the capacity and strength of this partnership can survive as we continue to reduce Federal expenditures.

Congress has supported this partnership in the past. It has been an integral part of the trust that has built up over time and is making so much valuable work possible. We want to continue this relationship and hope that we can together take advantage of the opportunity before us to use this partnership as a model for addressing many of this country's critical natural resource problems on private lands.

Again, I want to thank you, Mr. Chairman, for the opportunity to appear before you this morning, and we would welcome the chance to answer any questions that you might have.

PREPARED STATEMENTS

Senator COCHRAN. Thank you very much, Mr. Secretary. We have your complete statement and the prepared statement of Mr. Johnson and they will be made part of the record.

[The statements follow:]

PREPARED STATEMENT OF JAMES R. LYONS

Mr. Chairman and Members of the Committee, it is indeed a privilege to appear before you this afternoon to discuss the fiscal year 1996 budget for the conservation programs of the U.S. Department of Agriculture (USDA). I would like to make a few summary remarks and then introduce Paul Johnson, Chief of the Natural Resources Conservation Service (NRCS), who will present a more detailed discussion of the budget proposal.

Mr. Chairman, American agriculture is the envy of the world, not only for its productivity in food and fiber but also for its prospects for long-term health. It is backed up by a conservation support system unmatched around the world. That support system is a complex fabric of relationships and partnerships, and it is one that is kept as voluntary as possible. At the heart of it, and indispensable to it, is the Natural Resources Conservation Service.

As we look at NRCS' role in America's conservation support system, Mr. Chairman, what we are really seeing here is "chemistry"—a special kind of chemistry that has been evolving for more than half a century. It's a chemistry that bonds the Natural Resources Conservation Service with local conservation districts and private landowners, with state agencies and other federal departments, with the research community, and with a vast and growing number of partners across the country.

NRCS brings to this chemistry its technical expertise, certainly its technical standards for soil science—standards recognized worldwide—standards that ensure good science, consistency across state and regional lines, fairness, and flexibility. But more than that, NRCS with its energy and ideas and commitment brings a spe-

cial bond. There is the bond of trust—that NRCS stands for scientific objectivity, a commitment to a productive agriculture in harmony with a healthy land and a belief that voluntary stewardship works.

When American agriculture was asked to meet the conservation compliance requirements laid out in the 1985 farm bill, the farmers of this country said, "Yes, we'll do it. We'll accelerate our stewardship effort. But we want the Natural Resources Conservation Service [back then it was the Soil Conservation Service] at our side." They said that because they trusted NRCS, because they wanted standards to be as consistent and fair as humanly possible across the land, and because they wanted real experts at their side as they took on new ways of farming. And just look at what has been accomplished in the last 10 years, Mr. Chairman, basically without a hitch! I don't believe this country could have done it without the help of the Natural Resources Conservation Service.

The business of agriculture, with its growing environmental responsibilities, is getting more complex by the hour. That makes the Natural Resources Conservation Service, and its "chemistry" with people and good science, all the more important to the agriculture community and really to society at large. This "chemistry" has resulted in a partnership that benefits the land and local people.

There are many types of partnerships—but we think this partnership is uniquely suited to helping this country solve its natural resource problems. First of all—it is a partnership that works voluntarily with private landowners, farmers, and ranchers. It respects private property rights, recognizing that the landowners and users must have control over what happens on their properties as it affects their present and future economic well-being and the future sustainability of their lives and businesses. And yet, it is a partnership that challenges landowners and users to think beyond themselves—to think of natural resource issues that begin on their properties but reach into our communities as a whole. The partnership calls upon our instincts towards stewardship, towards supporting our communities and future generations that will use their land and live in their communities.

The partnership is dynamic and can adapt quickly to changes in technology, financial resources that our partners bring to the table, and changing local demands and interests at the local level. The partnership encompasses multiple levels and types of knowledge, information and understanding, and allows it to make maximum use of all the strengths and abilities that each of us bring to the table.

It is critical that you understand the currency of this partnership. In large part, it is the programs and resources that each individual member of the partnership brings to it. In the case of NRCS, it is its technical assistance capabilities, the soil survey program, the snow survey program, our small watersheds restoration program, the Great Plains program, our data sets generated by the National Resources Inventory, the Resource Conservation Act appraisals, and many others.

Each of these components have value in and of themselves. They each allow the agency and the partnership to do specific things that are necessary to identify and solve problems. But it is just as important to recognize and understand that our leadership at the state level uses these components, these programs, to create a web of interactions, a system, where the value of one component is leveraged because it frees up other resources held by our partners to do other work.

This is the principle of comparative advantage, and it is working dynamically and powerfully in this partnership. I encourage you to speak with your state conservationist, explore with them the partnership that has been created in your state to solve your constituent's problems, and see how the programs and policies of NRCS make this partnership possible.

I have behind me, and you should have before you on paper, a diagram that depicts this web, this system at work in each of your states. As you can see, we have depicted the interactions that occur daily and persist over time, and that make possible a partnership on the land that respects private property rights, but challenges us to reach beyond just our properties.

You must be careful as you contemplate each of the programs and activities of NRCS—because you cannot think of them in isolation. In the diagram behind me, the partnership is supported by these programs woven together as in a fabric or web. Pulling out one of these threads puts at risk numerous other activities that are united by this system of components. Of course, we do not want this to happen, but individual components CAN be pulled out, but not easily. We need to work closely with you as you consider the difficult decisions before you to ensure that as much of the capacity and strength of this partnership can survive.

Mr. Chairman, I should mention one other critical element of the partnership that you see depicted in this diagram. I mentioned it earlier, and it needs to be repeated—Trust. It is one of the intangibles that is created over years of shared commitment and shared contributions to solving important and difficult problems. It

comes from our people living and working in your constituent's communities, our people's children going to your constituent's schools, their families attending your constituent's churches, parks, playgrounds, and shopping centers.

We cannot depict in this diagram what trust means for this partnership, but it infuses it, and it is the glue that helps hold it all together as this partnership evolves and changes over time to effectively serve the people and the land. Congress has supported this partnership in the past, it has been an integral part of this trust that has built up over time and is making so much valuable work possible. We want to continue this relationship and hope that we can together take advantage of the opportunity before us to use this partnership as a model for addressing as many of this country's critical natural resource problems on private lands.

Depicted in the diagram are many of the programs, initiatives, and projects that this partnership has made possible. The following examples are unique to some of your states, but this partnership exists in every state, and we can find initiatives and activities like this across the country.

One example is the Malpai Borderlands Project in New Mexico. This conservation project was started by local conservation district cooperators and the Animas Foundation to resolve a simmering conflict between ranchers and environmentalists. Environmentalists wanted the land set aside to protect endangered species. Local landowners wanted to preserve their cultural rangeland heritage and also continue to graze livestock in a way that was not harmful to the resource. The cooperation between environmentalists and ranchers, which began with 775,000 acres and has since expanded to encompass more than 1 million acres.

The project, in the Southwest corner of New Mexico and the Southeast corner of Arizona involves public land managed by various Federal agencies, the states of New Mexico and Arizona, and 36 private ranchers. NRCS was asked to participate for the technical assistance and administrative infrastructure it uniquely could provide.

NRCS helped form a coalition consisting of the U.S. Forest Service, the U.S. Fish and Wildlife Service, the Bureau of Land Management, the Cooperative Extension Service, state land offices, game and fish agencies, and state divisions of forestry, and, of course, the private landowners. The Nature Conservancy, the Animas Foundation, and other non-governmental organizations are also active partners.

A unique conservation practice in the Malpai project is a system of rangeland banking, under which a landowner "banks" his 10,000 acres for a couple of years to allow it to rest while he continues to graze his livestock on another ranch in the program. Two years later, another rancher "banks" his land. Invading brush is controlled by prescribed burning which also helps protect a scarce water supply.

NRCS and other agencies have been able to cooperate on rules and regulations and helping people to understand and voluntarily implement the laws and achieve a healthier environment and a healthier economy.

The Kaskaskia River Project in southwest Illinois is another example. Here, we had a situation where local citizens were concerned about maintaining the long-term ecological health as well as the economic viability of the 40 miles of Kaskaskia River corridor, while keeping management and ownership in private hands. NRCS and the local Resource Conservation and Development council worked with landowners along the Kaskaskia to develop a long-term management plan that will keep the bottomland hardwood timber resource intact and improve ecological conditions. NRCS also is helping individual landowners develop conservation plans that take into account the needs of the entire ecosystem as well as their own operation.

The bottom line to this is what the local chairman for the Kaskaskia Resources Private Lands Initiative Committee, had to say: "Without the involvement and coordination of the Natural Resources Conservation Service and the technical expertise of its people, I don't think we could have pulled this many people together for a project of this scope. NRCS knows how to involve the public, how to envision and plan a long-term project, and how to help local people make good ideas into realities."

This budget furthers the Administration's goal of providing this support to private landowners—to help them protect and enhance their natural resources and to understand the relationships among resources—and its special commitment to enhancing and protecting the Nation's wetlands.

This budget supports the Administration's wetlands policy as well, by calling for increased funding for the Wetlands Reserve Program (WRP). WRP is popular and provides incentives for comprehensive wetlands restoration. It serves as the cornerstone of efforts to achieve a no-net-loss of wetlands and to move into the net-gain arena.

The budget strikes a critical balance in exercising fiscal restraint while continuing the important conservation work of this agency. We are doing our part in meeting

the needs of the land and people. I believe this budget responds fully to the twin public aims of downsizing and making government more responsive and of protecting our natural resources and environment.

This is an historic occasion for us—it is our first budget request as the Natural Resources Conservation Service. Through the USDA Reorganization Act of 1994, Congress authorized changes in USDA. Specifically, the Act enabled us to establish the Natural Resources Conservation Service by combining the authorities and programs of the former Soil Conservation Service with five natural resource conservation programs previously administered by other USDA agencies. The Soil Conservation Service has a proud history—60 years next month—on the land and with the people who pioneered this Nation's soil and water stewardship. The new name better defines what the agency does in helping people conserve all natural resources on private lands. The agency vision—"a productive Nation in harmony with a quality environment"—further identifies NRCS' direction.

NRCS reinvention efforts are directed at responding to the American people by enhancing the focus on voluntary programs and maximizing resources at the field, customer-service level. To do this, the agency is consolidating and closing field offices to reduce the number of locations by just over 400 in a three year period. The goal is to reduce from nearly 3,000 field offices to about 2,500, but we will continue to serve all the communities that want our help. In addition, while Headquarters staffing will be cut by more than 50 percent and overall agency staffing reduced from 13,899 in 1993 to 11,549 in 1999, the percentage of employees at the field level will be increased to 75 percent. This will place more services where customers can use them, at field and county offices.

Another USDA streamlining effort is called InfoShare. This customer-oriented initiative will improve delivery of services in USDA field-delivery programs through improved business process reengineering (BPR) and information systems integration. InfoShare will coordinate planning, acquisition, development, implementation, and management of information technology resources. InfoShare is an important part of USDA's effort to modernize and consolidate both the field structure and administrative functions and to provide remote delivery of customer services in the 2,500 field service centers. These centers will be servicing USDA farm, rural, and conservation customers.

InfoShare benefits agency and customer partnerships by 1) providing one-stop shopping to multi-agency programs; 2) significantly reducing paperwork required of customers and employees; 3) facilitating data sharing; and 4) reducing repetitive requests for information. We expect the implementation of InfoShare to result in real cost savings. Initial estimates show that InfoShare has saved over a million dollars in telecommunications costs through implementation of voice and data concentration points at eight sites.

These are just a few examples of steps the Administration is taking to create a government that works better and costs less.

In closing, Mr. Chairman, the Administration's USDA budget proposal for conservation strengthens America's conservation support system, protects the Nation's wetlands, and continues us on the path of reinvention and streamlining government with fiscal restraint.

I would now like to introduce Mr. Paul Johnson, Chief of the Natural Resources Conservation Service. Paul will discuss specific budget items and answer any follow-up questions.

Thank you very much for the opportunity to speak to you. I look forward to working with you in whatever way I can in the coming months on these critical issues.

PREPARED STATEMENT OF PAUL W. JOHNSON

Mr. Chairman and Members of the Committee, I welcome the opportunity to appear before you today to outline the fiscal year 1996 budget request for the Natural Resources Conservation Service (NRCS), formerly the Soil Conservation Service (SCS), and to outline the challenges that lie ahead. This is a historic occasion as it is our first budget as the Natural Resources Conservation Service.

As the 20th Century winds to a close we face a serious set of challenges for American agriculture: to carry on the greatest agricultural production system in history in an environmentally—and economically—sustainable fashion. One challenge is to meet the food and fiber needs of this Nation and much of the world, doing so with the best technology we can advance for enhanced production while lessening the impact imposed on our natural resource base. Conservation has to be done on the private lands of this country, if we're to sustain our natural resources. I believe we can accomplish these things, but it will require great skill and dedication—on the

part of farmers and ranchers, local, state and Federal governments, agri-business and the private sector, environmentalists, and the public at large.

This challenge is no easy burden: the United States is blessed with extraordinary natural resources—more than a billion acres of agricultural land and an abundant supply of fresh water. There will be continuing pressures on us to use these resources to produce for the strong and growing markets of Asia; China alone has 1.2 billion people and is in the industrialization process. Added to that is the pressure we are apt to impose on ourselves, to feed the millions in countries that lack the resources—land, water, financial, managerial and information—to produce for themselves. These two imperatives, meeting global market demand and the moral responsibility to address hunger, will impose increasing burdens on our agricultural system.

With enactment of the Food Security Act in 1985 and the Food, Agriculture, Conservation, and Trade Act in 1990, we have embarked on an important path of reconciling the conflict between agricultural and environmental goals—an unnecessary conflict, in my judgment. These statutes set up a number of programs designed to help farmers and ranchers to improve their environmental performance, and they should continue.

The critical element of these programs is that they are designed to be fair, responsive to the real needs of landowners and users, and above all, to improve productivity, farm income and natural resources protection. The programs as they now stand can use improvement; we can do better at listening to the needs of our farmer and rancher partners, and we can do much better at tailoring the technology and knowledge the Agency has to the land and landowner needs, while keeping high net economic benefits and meeting National goals.

The mission of NRCS is to provide leadership and administer programs to help land owners and users to conserve, improve, and sustain our natural resources and the environment, even while enabling the United States to continue as the world's preeminent producer of food and fiber. Our guiding vision is one of a productive nation in harmony with a quality environment.

NRCS staff works at the local level in partnership with State and local conservation staff, volunteers, and land users to address natural resource protection and development needs. These activities bring multiple benefits, both at the farm level and far beyond, including sustaining and improving agricultural productivity while reducing erosion, improving soil and water quality, reducing and preventing damage caused by floods and other natural disasters. A key element also is enhancing the ability of our agricultural lands to support economic growth, income, and jobs in rural America.

The budget we are requesting for fiscal year 1996, \$1.024 billion, is different from the \$836.6 million available for fiscal year 1995, and the \$1.366 billion available for fiscal year 1994. This difference over fiscal year 1995, is for uncontrollable costs—inflation, pay costs—to maintain fiscal year 1995's program level, as well as for the cost-share programs gained through reorganization. These costs include technical assistance and administrative costs associated with these programs. Comparable decreases should be identified in the budgets of other agencies, so that there is not an increase due to these programs in the Department's request. The bulk of the budget is for maintaining our successful conservation and technical assistance programs, and for implementing fully the agency's reinvention plan, which is aimed at improving NRCS' responsiveness to the needs of our constituencies and the efficiency with which we deliver the support we provide. I will discuss the reorganization and NRCS' structure in greater detail shortly. This budget would maintain NRCS' technical assistance and planning activities, partially restore watershed project activities, adjust some funding for the agency's cost-share programs gained through reorganization, and increase the acreage enrolled in the Wetlands Reserve Program to 300,000 acres.

Following is a table showing the major items in this year's budget request and contrasting it with the two prior fiscal years.

[In thousands of dollars]

Appropriation	Fiscal year—		
	1994	1995	1996
Conservation operations	591,174	603,408	645,735
Wetlands Reserve Program	66,675	683,177	210,000
Watershed and flood prevention operations	586,307	70,000	100,000
Resource conservation and development	32,945	32,845	28,900

[In thousands of dollars]

Appropriation	Fiscal year—		
	1994	1995	1996
Great Plains Conservation Program	25,658	15,172	11,000
Colorado River Basin Salinity Control Program	13,783	600	2,681

Note: The actual 1995 appropriation for the Wetlands Reserve Program was \$92.3 million and for the Colorado River Basin Salinity Control Program was \$4.5 million. The technical assistance dollars for these two programs are reflected in the Conservation Operations program. fiscal year 1996 Conservation Operations includes technical assistance costs for the cost-share programs transferred as a result of USDA reorganization.

I would like now to describe how NRCS differs from other federal agencies and summarize the role of the agency. I will outline the major programs NRCS administers and describe some of the things we and our partners at the state and local levels have achieved as well as things we have planned.

STRATEGIC ASSETS OF THE NATURAL RESOURCES CONSERVATION SERVICE

NRCS provides natural resources conservation assistance primarily on private lands. More than 70 percent of the land in the contiguous United States is privately owned, including virtually all of the Nation's agricultural lands. It is on the private lands, where millions of individual decisions are made by farmers and ranchers, that the ultimate success of the majority of our natural resource efforts will succeed or fail in helping meet the twin goals of productive agriculture and an economically and environmentally sustainable future.

NRCS is the only Federal agency whose major purpose is to provide consistent technical assistance to private landusers across the country. The agency's focus is on helping landowners and users achieve natural resource and environmental goals while maintaining productive and profitable operations and economically viable rural communities. NRCS has had some significant successes in the past, and the new structure is designed to create new successes for now and into the future. Let me describe some of the agency's assets.

Delivery system.—NRCS has a nationwide network of professionally staffed local offices that provide conservation technical assistance to owners and users of privately-owned land. This nationwide delivery system is based on a partnership that combines a federal natural resource presence at the local level with locally sponsored and controlled conservation districts and their employees. This conservation infrastructure is interwoven and interconnected at the local, State and Federal levels with complex relationships and program support systems that are interdependent. Local service will be continued, but with the reorganization and consolidation of field offices this operation will be significantly more efficient and will enable our field staff to provide the kind of site-specific technical assistance individual private landowners need and want.

Technical skills.—NRCS' natural resource specialists are trained to deliver technological support to groups and individuals quickly, efficiently and consistently nationwide. By regionalizing NRCS, our technical staff will be able to apply their knowledge of soil science, engineering, landscape architecture, agronomy, biology, range management, economics, geology, and other fields with a much greater degree of sensitivity to local conditions. NRCS field offices and staff working in partnership with the local conservation districts are used as a primary source of help by local people—and often by people administering programs for other Federal, State, and local agencies. About 9,000 staff is located at these offices.

Technical excellence.—Throughout government and private industry, NRCS specifications for soil and water conservation practices are the national standards. In addition, the agency is the leader in soil classification and soil mapping. Recently, in recognition of the vital importance of soil, NRCS has begun to build up competence and emphasize the fundamental role of soil quality.

Natural resource planning experience.—NRCS has vast experience in broad-scale planning in watersheds and other areas and site-specific planning on farms and ranches to address natural resource concerns. Effective natural resource planning in the future will require this type of planning process to develop effective solutions that meet the needs for a sustainable land and its people. NRCS is now serving as a catalyst by providing coordination to bring local people together with skilled technical people to develop and implement meaningful solutions. These planning efforts are provided through the PL-566 Small Watershed Program, the Resource Con-

servation and Development (RC&D) Program, and Coordinated Resource Management provided through Conservation Operations.

Partnerships and volunteerism.—Since its creation, NRCS has operated through voluntary cooperative arrangements with individuals, the private sector, and Federal, State, and local governments. The value of NRCS technical assistance is recognized by local and State partners; equally, we recognize the invaluable contribution of volunteers, who contribute immeasurably to conservation efforts. Americans from all walks of life have freely and generously given of their time. In fact, in fiscal year 1994, more than 12,000 NRCS Earth Team volunteers donated nearly 600,000 hours—equivalent to 300 full-time employees—to conservation efforts.

Local people as decision-makers.—When NRCS delivers conservation and program assistance, the agency works under cooperative agreements with some 3,000 conservation districts that are established under state law. About 17,000 local conservation district supervisors provide the agency with invaluable guidance. Not to boast, but the NRCS cooperative team structure is an established and practical example of how Federal programs can be managed with local guidance at the local level. It is crucial to remember that the agency's approach is a voluntary one. Our professionals provide options for problem-solving—developed in conjunction with customers, but it is the customers who make the final decisions.

Leverage.—State and local governments contribute substantially, with both people and dollars complementing NRCS technical assistance. In fiscal year 1994, State and local governments spent more than \$500 million on conservation—a considerable increase from the \$247 million spent a decade ago. Without NRCS technical assistance, which greatly enhances the value of State and local efforts, these funds almost certainly would not have been spent on natural resource protection. In a sense, this cooperation constitutes a two-way leveraging: State and local programs and NRCS benefit from each other's involvement.

Now I will describe our programs and plans for fiscal year 1996.

PROGRAM EFFECTS AND THE FISCAL YEAR 1996 BUDGET REQUEST

Many programs provided by NRCS are a catalyst for local investment and as a result, enhance local economic activities. Other programs provide services that are voluntary in nature, and not available or provided by other government or private entities. These programs and activities are an essential component of the conservation fabric of the Nation. I will briefly highlight several for you.

CONSERVATION OPERATIONS is the foundation for most agency activities. These activities are carried out through the conservation infrastructure, a complex array of local, State and Federal agencies and organizations and local people working together for natural resource protection. The relationships are complex and NRCS is an integral part of these local, State and Federal interdependent program support systems. Many grassroots programs and initiatives are funded by conservation operations. Several are described below.

Conservation Technical Assistance is the cornerstone for most agency activities. The fiscal year 1994 appropriations were \$502,561,000; the fiscal year 1995 comparable appropriations are \$516,950,000 and the fiscal year 1996 budget request is \$554,273,000. As stated previously, this difference over fiscal year 1995 is due in large part to uncontrollable costs from inflation and pay costs as well as from the addition of the cost-share programs, and maintains a program at the fiscal year 1995 level. The implementation of several technical assistance and technology diffusion initiatives are planned. One such effort will assist land users in the West to plan and implement water management and efficiency, and water quality measures in an area suffering both water shortages and water quality problems.

In addition, significant emphasis will be placed by the agency on developing conservation plans with farmers and ranchers that address their objectives for the integrated management needed to sustain agricultural production and natural resources. Instead of producers having separate farm plans for different Federal or State programs, or for different natural resource problems, NRCS will provide leadership to assist producers to develop one conservation plan that is comprehensive in scope. All of the producer's natural resource objectives and the various conservation programs or regulations that need to be followed will be integrated into one conservation plan. This will reduce the conflicts and confusion among different plans, making it easier for producers to participate. Reducing the paperwork burden for farmers will make it easier for them to adopt conservation systems.

Conservation technical assistance provides technical assistance to land users, communities, units of State and local government, and other Federal agencies for planning and implementing solutions to natural resource problems. In the past decade major strides have been made in reducing erosion; improving soil and water

quantity and quality, air quality, pasture and range conditions; improving and conserving wetlands and woodlands; enhancing fish and wildlife habitat; and reducing upstream flooding. This assistance is based on voluntary local landowner cooperation and recognizes the value of educational, technical, and financial assistance. These principles apply as we are responding to individual needs and to nationally determined priorities. Still, more remains to be done. Also, because neither agriculture nor the environment is static, and both are constantly changing, the agencies and programs need also to be constantly evolving.

NRCS administers several cost-share programs and also provides technical assistance to individuals and groups participating in these programs and in the Agricultural Conservation Program (ACP). During fiscal year 1994, NRCS provided technical assistance to more than one million producers and other land users, as well as to units of government. This resulted in conservation treatment on over 65 million acres of land, including cropland, rangeland, pastureland, woodland, and other land.

NRCS also provides technical assistance to implement a number of the provisions of the 1985 Food Security Act and the Food, Agriculture, Conservation and Trade Act of 1990, including those addressed are highly erodible lands (HEL), wetlands (swampbuster), Wetlands Reserve Program (WRP), and Conservation Reserve Program (CRP). NRCS technical field staffs help to make determinations as to highly erodible lands and wetlands, and assist landusers to develop and implement CRP plans as well as the conservation plans they need to meet the requirements of the two Farm Bills.

Conservation Compliance.—Since 1985, the Agency has devoted a significant portion of its technical assistance resources to helping farmers and ranchers meet conservation compliance provisions. With NRCS technical assistance, more than 1.7 million plans have been prepared covering about 142 million acres of highly erodible land, and 95 percent of those plans were implemented by the mandated deadline of December 31, 1994. Between 1985 and 1995, technical assistance was provided to an average of 1.25 million decision-making land owners and users each year; one result is that soil erosion has been reduced by over a billion tons annually. Conservation practices remain to be installed on 6.5 million acres. Much of this work will require on-site technical assistance by NRCS field employees to help land users devise and install structural and other more intensive conservation practices.

Preliminary 1994 Status Review data show that approximately 48 percent of farmers have conservation systems that are at sustainable levels of soil loss, levels that allow soil to be created at a faster rate than it is lost. However, 35 percent have conservation systems that maintain soil erosion losses that range from one to two times soil loss tolerance levels annually; nearly 12 percent have conservation systems at two to three times soil erosion tolerance levels annually; and 5 percent maintain conservation systems in excess of three times the soil loss tolerance level annually. (See attached table.) A substantial number, however, lacks the kind of management and planning that will assure a sustainable quality and quantity of our valuable soil resource.

Beginning in 1995, all producers who receive USDA program benefits must be fully applying a conservation plan on highly erodible land. This does not end the need for NRCS to assist producers. Producers are regularly adjusting their farming operations to respond to weather conditions, infestations of weeds and insects, economic conditions, and agricultural commodity programs. These adjustments often require changes in their conservation systems and NRCS field staff are needed to assist producers with these changes. Conservation plan revisions may be needed for new conservation practices that farmers need, and our experience indicates that up to 20 percent of producers change their conservation systems each year. Although these producers have plans that meet the policies established for conservation compliance they may not meet the needs of the land.

Wetland determinations and certifications.—NRCS must complete initial wetland determinations on approximately 35 percent of farm tracts operated by USDA program participants and perform certifications on all wetland determinations to assure they meet the current wetland definition. On January 6, 1994, four Federal agencies with wetland protection responsibilities signed a historic Memorandum of Agreement recognizing NRCS as the lead Federal agency for wetland determinations on agricultural lands. Farmers can now turn to NRCS for determinations that identify the extent of wetlands under both the swampbuster provisions of the 1985 and 1990 farm bills and Section 404 of the Clean Water Act. This new responsibility brings increased commitment of staff resources to provide prompt, accurate, and effective service to our Nation's agricultural land owners and users.

Grazing Land Conservation Initiative (GLCI).—This grassroots-driven initiative has helped NRCS better define the resource needs and benefits generated when

grazing lands are improved. NRCS has been requested by this group to continue technical assistance to livestock producers on private grazing lands. Grazing lands include rangelands, pasture, hayland, and grazed forest lands. The latest 1992 National Resources Inventory (NRI), shows that grazing lands—mostly rangeland and pasture—represent 642 million acres, or almost half of the non-Federal lands in the United States.

The NRI analysis of range vegetation shows that over 15 percent of non-Federal rangelands are in poor condition; over 44 percent are in fair condition; 34 percent in good condition; and only 6 percent in excellent condition. The NRI indicates that 75 percent—nearly 299 million acres—of non-Federal rangelands need conservation treatment. NRI information indicates that over 46 percent—in excess of 58 million acres—of pasture in the U.S. needs conservation treatments such as improved grazing and erosion reduction, to contribute to a healthy land and be productive.

Properly managed grazing land represents a renewable resource for producing food and fiber. Vegetative cover on well-managed grazing lands contributes to: 1) increased water quality and quantity, 2) improved wildlife habitat, 3) reduced soil erosion and sedimentation, and 4) improved riparian areas. Conservation Operations will support technical assistance for these unmet conservation needs. This will enable NRCS to provide multi-resource technical assistance to support grazing lands conservation and water quality improvement.

InfoShare is a customer-oriented initiative within USDA. It will improve delivery of services in USDA field-delivery programs through improved business process reengineering (BPR) and information systems integration. InfoShare will coordinate planning, acquisition, development, implementation, and management of information technology resources. InfoShare benefits agency and customer partnerships by 1) providing one-stop shopping to multi-agency programs; 2) significantly reducing paperwork required of customers and employees; 3) facilitating data sharing; and 4) reducing repetitive requests for information.

One of the areas where BPR has resulted in significant positive change in a core NRCS business process is in the design, construction, and implementation of the agency's Field Office Computing System (FOCS). This system, developed by reengineering the natural resource conservation planning model, steps away from the single resource plan used for Food Security Act compliance with its intensive record keeping requirements, and enables a much more holistic, natural resources oriented planning process for protecting and enhancing soil, water, air, plants, and animal resources while preserving agricultural profitability for farmers and ranchers. Literally hundreds of employees, customers, and partners were involved in this five year effort that is now coming to fruition. FOCS and the core conservation planning process it automates will be merged into the concept of the USDA Field Service Center within the InfoShare interagency business and information strategic plan.

New technology.—Most of the natural resource information used by NRCS is referenced to a geographic location on the ground, and there is a need to put this data in digital form for more accessible use in a geographic information system (GIS) available at state and field offices. This will improve customer service by providing more usable and accurate information for use in natural resource planning and decision-making, and for environmental assessments and evaluations. Currently, about 200 NRCS field offices are using GIS. We are embarking on an important review of the information NRCS collects to assure that it meets the real resource information needs of farmers and ranchers. As part of this effort, we also are working on improving interagency cooperation, and the ways in which we share and display natural resource, economic, and other data so they conform to the national GIS database standards. Increasing the availability of such data is necessary for USDA reorganization and reinvention at the field level.

Under the 1977 Resources Conservation Act (RCA), USDA through NRCS, with the assistance of nine other Federal agencies, conducts and analyzes ongoing comprehensive inventories and assessments of the status, condition and trends of America's natural resources on all non-Federal lands. This information is used by USDA, other Federal agencies, State and local governments, and other organizations to support agriculture and conservation policy development and program evaluation. NRCS is working to assure the RCA Appraisal addresses the distinct characteristics of the regions of the country. The agency also will be developing, in the next 18 to 24 months, the third National Conservation Program, also called for under the RCA.

USDA Centers of Excellence initiative.—USDA is working in partnership with the 1890 Land Grant Institutions and Tuskegee University, to develop low cost conservation systems to improve water quality and reduce erosion. USDA is establishing Centers of Excellence at the 1890 schools. NRCS and the 1890 Institutions have a history of cooperative ventures that have provided knowledge and skills necessary to strengthen and broaden the application of technologies to the limited resource

and socially disadvantaged farmers they serve. It is more economical and efficient to support the Centers of Excellence with the universities, than developing that capacity within USDA. The focus of the proposal is to develop and evaluate sustainable ecosystems that would improve and protect water quality and quantity.

One Center of Excellence, at Virginia State University, would evaluate agronomic plantings used in soil erosion control to determine their long-term ability to remove concentrations of nitrate and other potential water pollutants. Virginia State would provide scientists and other staff, land, and facilities for testing plant communities, while NRCS would provide an agronomist, some funding for university employees, and equipment.

Increased assistance to Native Americans.—Many of the more than 310 reservations covering more than 50 million acres in the 48 contiguous states, four areas of trust land, 12 Alaska Native Regional Corporations and 217 Alaska Native Villages have been requesting technical assistance. We estimate receiving 150 requests to establish tribal land field offices each year. Staff in those offices are needed to provide basic technical assistance for resource problem identification and conservation planning and application. NRCS plans to provide technical assistance and capacity-building assistance needed on a full-time basis on Indian lands that have significant natural resource problems. This assistance will begin the process of developing local capacity in natural resources management by establishing an internship/self reliance program similar to the one in operation at the Wind River Reservation in Wyoming. Tribal employees will be trained through on-the-job and educational experiences as a conservation workforce on Indian lands.

Snow survey and water supply forecasts provide western states and Alaska with vital information on summer water supplies. The fiscal year 1994 appropriations were \$5,820,000; the fiscal year 1995 appropriations are \$5,756,000 and the fiscal year 1996 budget request is \$5,852,000. NRCS field staffs provide necessary leadership, standardization of procedures, and automation to a partnership of Federal, State and local personnel to collect snow-pack data from more than 1,200 remote high mountain sites. Data are collected with many partners, including Conservation Districts, Bureau of Indian Affairs, Bureau of Land Management, Forest Service, the National Weather Service, Army Corps of Engineers, Bonneville Power Administration and many State and local entities both public and private. After compiling and analyzing the data, NRCS is able to provide snowpack estimates and water yield on a monthly basis throughout the snow melting period. The knowledge gained through this effort supports critical decisions on billions of dollars of agricultural production, municipal water supply, hydroelectric and industrial water supply, flood control, and water flow requirements for fish and wildlife. This modest program contributes substantially to the economic and environmental well-being of a very large part of the country.

Soil Surveys provide the public with local information on the uses and capabilities of their soil resources. The fiscal year 1994 appropriations were \$73,904,000; the fiscal year 1995 appropriations are \$72,632,000 and the fiscal year 1996 budget request is \$76,735,000. Soil surveys are based on scientific analysis and classification of soils and are used to determine land capabilities and conservation treatment needs. The published soil survey for a county or designated area includes maps and interpretations with explanatory information that is the foundation of resource policy, planning and decision-making for Federal, State, county, and local community programs. Homeowners and landowners also use soil survey information when making decisions. Soil surveys are conducted cooperatively with other Federal agencies, land grant universities, State agencies, and local units of government who contribute funds and staff.

Soils information has been gathered for many years and is primarily contained in published soil survey manuscripts and maps. There is a need to create digital orthophotography of the U.S. for use in geographic information systems (GIS). NRCS has the leadership role for coordinating the development, maintenance, and distribution of a modernized digital soils data base. Geographically referenced digitized soil survey data, converted into orthophoto maps, provide the accurate reference base needed for computer-assisted conservation or natural resource planning. This will provide the accurate reference base needed for geographic referenced data sharing. In addition, digitizing the soil surveys provides efficiency when updating and maintaining the soil survey data.

Plant Material Centers assemble and test plant propagation and the usefulness of plant species for biomass production, carbon sequestration, erosion reduction, wetland restoration, water quality improvement, stream bank and riparian area protection, coastal dune stabilization, and to meet other special conservation treatment needs. The fiscal year 1994 appropriations were \$8,889,000, the fiscal year 1995 appropriations are \$8,070,000 and the fiscal year 1996 budget request is

\$8,875,000. Plant materials represent inexpensive, long-term conservation permanent solutions to many environmental and natural resource problems and their maintenance costs are usually low. Many landowners and managers willingly use plant materials, if available to meet their conservation needs.

The work at the 26 centers is carried out cooperatively with State and other Federal agencies, commercial businesses, and seed and nursery associations. Since most commercial nurseries will not develop new plant materials due to limited markets, but will grow and market the stock once a dependable plant has been developed, the Plant Materials Centers play an important research and development role. After species are proven, they are released to the private sector for commercial production.

WETLANDS RESERVE PROGRAM (WRP) is a voluntary incentive program to assist owners of eligible lands to restore and protect wetlands. Under the WRP, the Secretary of Agriculture acquires easements, develops wetland restoration plans, cost shares the restoration, and then monitors maintenance of the easements. Close cooperation with other Federal and State agencies and private conservation entities is an integral aspect of program delivery. The fiscal year 1994 appropriations of \$66,675,000 provided technical assistance and payments to landowners; the fiscal year 1995 appropriations of \$83,177,000 and the fiscal year 1996 budget request for \$210,000,000 are for payments to landowners. Technical assistance for fiscal year 1995 and fiscal year 1996 is contained within Conservation Operations. The fiscal year 1994 program was limited to 20 states and an acreage enrollment cap of 75,000 acres. The fiscal year 1995 program has no state limitation or enrollment cap. The intent is to offer the program in all 50 states. The estimated acreage to be enrolled in fiscal year 1995 should be approximately 115,000 acres. The fiscal year 1996 budget request will ensure that the program continues to be available in all States allowing for the enrollment of an estimated 300,000 acres. Under current law 975,000 acres must be entered into the program by the end of the year 2000.

The program is one of the most comprehensive wetlands restoration efforts ever implemented. It will ultimately result in more wetland restoration than has been implemented by Federal and State agencies combined during the past 50 years. The program serves as the cornerstone of efforts to achieve a no-net-loss of wetlands and to move into the net-gain arena. It is the Nation's primary non-regulatory wetlands conservation program.

The program preserves, protects, and restores valuable wetlands mainly on marginal agricultural lands. Wetland restoration improves water quality and provides flood water retention, ground water recharge, open space, and aesthetic values. The improvement of habitat conditions for migratory birds, and other wildlife is also an important program focus.

Landowner response to the fiscal year 1992 and fiscal year 1994 limited WRP sign-ups has been exceptional. Because of the intense interest and the intricacies of land surveying and legal work, there are applications for over 200,000 acres of easements beyond the available funds, potentially valued at over \$100 million that could be entered into the program in fiscal year 1995. This could increase to approximately 350,000 acres by the end of fiscal year 1995, over and above the 115,000 acres that we expect to enroll in the program during fiscal year 1995. The fiscal year 1996 proposal will work to address this high degree of interest in the program and meet the mandated enrollment goal.

SMALL WATERSHEDS PROGRAM is the first and only national program that helps local organizations plan and install watershed-based projects on private lands. It provides site-specific technical expertise and locally based watershed planning and financial assistance for plan implementation. The Watershed Program provides a process to solve local natural resource problems and avoid excessive regulation. The fiscal year 1994 appropriations for PL-534 and PL-566 were \$213,334,000; the fiscal year 1995 appropriations are \$70,000,000 and the fiscal year 1996 budget request is \$100,000,000. The authorized purposes of watershed projects include watershed protection, flood prevention, water quality improvements, soil erosion reduction, rural, municipal and industrial water supply, irrigation water management, sedimentation control, fish and wildlife habitat enhancement, wetland creation and restoration, and public recreation. The program empowers local people as decision-makers, builds partnerships and requires local and State funding contributions and ownership.

The program has been subject to what I view as legitimate criticisms in recent years, and there have been a number of attempts to end the program. While I agree fundamentally with those who have criticized the historical use of large dams, reservoirs, and channelization to achieve flood management as destructive of many natural processes and functions in treated watersheds, I do not believe the program as currently administered should be scrapped. Judicious use of physical works to

protect and manage watersheds can be constructive—both to natural systems and for protecting farm land from serious harm. For instance, the 1994 Galloway report on floodplain management shows that during the 1993 Midwest Flood, the Small Watershed Program was credited with avoiding \$400 million of damages to population centers, agriculture, and industry. USDA farm program disaster payments were significantly less in watersheds that had been treated with conservation measures through this program. This was also the case with Tropical Storm Alberto in parts of Florida, Alabama and Georgia.

The agency administers this program by authorizing local sponsoring organizations to begin the development of a plan. In fiscal year 1994, of the planning starts authorized, most were requested primarily to improve water quality from agricultural sources and to benefit fish and wildlife habitat. The remainder identified water quality as secondary purposes. Proposed project actions include agricultural waste management, nutrient and pesticide management, and other land treatment measures. An example is in Alaska where the first watershed project there authorized under this program is improving water quality to protect critical salmon spawning habitat. This project is important because it protects salmon as a subsistence food source for Alaskan Natives and for the fishing industry on the coast.

The agency has recently completed a Phase I review of authorized projects. With the agreement of everyone involved, including project sponsors, more than 500 dams and 1800 miles of stream channel modifications have been deleted and many other projects will have these measures replaced with environmentally sound measures for watershed restoration.

The agency has undertaken a comprehensive effort to reevaluate the program and is in the process of refocusing it to approach watersheds in a more comprehensive, ecosystem-based fashion, involving all local people with a stake in the outcome, in the broad range of land use and conservation issues. Priority will be given to watersheds where local people have identified the need for environmental restoration, water quality improvement, restoration of fish and wildlife habitat, and flood damage reduction. Waterway restoration will be included to improve floodplain riparian zones and water quality, and to enhance fish and wildlife habitat and recreation opportunities. Watersheds located in agricultural and rural community settings with low-income and socially disadvantaged farmers, as well as those serving Native Americans also will receive priority. NRCS will ensure that assistance to local leaders through the Small Watershed Program is supported by appropriate Federal partnerships, is compatible with national natural resource issues and complements State and local priorities.

The Emergency Watershed Protection (EWP) program provides assistance to reduce hazards to life and property in watersheds damaged by severe natural events. An emergency is considered to exist when floods, fires, droughts, or other natural disasters result in life and property being endangered by flooding, erosion, or sediment discharge. The fiscal year 1994 funds available, appropriated as emergency funds under the Budget Enforcement Act, were \$340,500,000 with \$83,276,759 available from current and prior years' appropriations. NRCS used \$133,160,413 in fiscal year 1994, and \$23,000,000 was transferred to the Consolidated Farm Service Agency, formerly Agricultural Stabilization and Conservation Service, for the Emergency Conservation Program. The remainder is available for emergency watershed protection work until it is expended, and \$25 million of these funds have been released by the Office of Management and Budget (OMB) so far in fiscal year 1995 to deal with new emergencies. EWP was utilized during the Midwest Floods in 1993, western wildfires and Tropical Storm Alberto in 1994, and floods in California and North Carolina—among others—so far in 1995. During the past eight years the program has been needed and used in an average of 26 states per year. Technical and financial assistance under the EWP program is available for small-scale, localized disasters not necessarily declared as national in scope. Among the emergency activities, generally performed with temporarily employed local labor, are disaster clean-up and subsequent rebuilding; restoring stream corridor, wetland and riparian areas; establishing quick vegetative cover on denuded land, steep land, and eroding banks; opening dangerously restricted channels; repairing diversions and levees, and assisting the Federal Emergency Management Agency when it plans and relocates communities away from floodplains.

RESOURCE CONSERVATION AND DEVELOPMENT (RC&D) is a program initiated and directed at the local level by volunteers. The fiscal year 1994 appropriations were \$32,945,000; the fiscal year 1995 appropriations are \$32,845,000 and the fiscal year 1996 budget request is \$28,900,000. Each RC&D area encompasses multiple communities, various units of government, municipalities, and grassroots organizations. The RC&D's represent an unusual approach for helping citizens address multi-jurisdictional natural resource and community development issues. NRCS pro-

vides coordination to the program which serves as a catalyst for these civic oriented groups to share knowledge and resources, and it leverages public and private funds to solve common problems—including economic development—in a given area. Assistance is obtained from the private sector, corporations, foundations, and all levels of government. Every dollar of NRCS Federal technical and financial assistance directly applied to local projects was matched in fiscal year 1994 by \$13 from other sources. In fiscal year 1994, RC&D areas completed 1,984 projects and Council members donated 415,000 hours of time. There are currently 277 authorized RC&D areas involving 2,016 counties across the country.

GREAT PLAINS CONSERVATION PROGRAM'S (GPCP) objective is to bring about a long-term solution to natural resource problems in the 10 states comprising the Great Plains region. The fiscal year 1994 appropriations were \$25,658,000; the fiscal year 1995 appropriations are \$15,172,000 and the fiscal year 1996 budget request is \$11,000,000. This request will provide technical and financial assistance to participants. The GPCP is a voluntary program that helps farmers, ranchers, and others plan and implement conservation plans through a program of scheduled technical assistance and long term contractual cost sharing to bring improved economic and social stability to the Great Plains area. In addition to providing significant wind and water soil erosion and sediment reduction benefits, the program improves water quality and range conditions, and provides wildlife and other environmental benefits.

COLORADO RIVER BASIN SALINITY CONTROL PROGRAM supports the objectives of the Nation's commitment to the 1973 International Boundary and Water Commission Agreement concerning the quality of water in the Colorado River delivered downstream to users in the U.S. and the Republic of Mexico. The fiscal year 1994 appropriations were \$13,783,000; the fiscal year 1995 appropriations are \$4,500,000 and the fiscal year 1996 budget request is \$2,681,000. The fiscal year 1994 and 1995 appropriations provided technical and financial assistance. The fiscal year 1996 request will provide financial assistance to participants; technical assistance to support this program is included in the Conservation Operations budget request. It is a voluntary incentive program that provides technical and financial assistance to farmers and ranchers to reduce salt loads into the Colorado River system. Projects are underway in Colorado, Utah, and Wyoming. Participants make on-farm improvements to reduce surface run-off of irrigation water from cropland; reduce excessive deep percolation and seepage of irrigation water from conveyance systems, and improve water quality. The program has been successful in the establishment of new artificial wetlands and in improving upland wildlife habitat. Current efforts demonstrate that both on-farm and off-farm structural and non-structural approaches are required to meet long-term objectives. Salt load reduction measures under the Colorado River Basin Salinity Control Program have amounted to approximately 181,079 tons of salt removed.

Reinvention efforts of NRCS will enable the agency to deliver programs and services more efficiently. Let me discuss these reinvention efforts in more detail.

REINVENTION OF THE NATURAL RESOURCES CONSERVATION SERVICE

A major goal of the Administration and Congress is to "reinvent government" so it works better and costs less, cutting waste and reducing bureaucracy. Congress authorized USDA reorganization in the "Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994." The Administration conducted the National Performance Review (NPR); a comprehensive bottom-up review of the Federal Government. NRCS is undergoing major reorganization that meets the intent of the USDA Reorganization Act and the NPR streamlining goals. Program activity is being reorganized into a more logical and cost-effective arrangement, primarily by decentralizing, setting up regional offices, and drastically reducing the Washington, DC staff.

Before developing its reorganization plan, NRCS gathered information from its employees, customers, partners, and others. The agency conducted 351 public forums around the country, and received more than 26,000 survey responses. People indicated that they wanted more local involvement in decision-making, continuation of voluntary conservation programs, NRCS technical expertise maintained and improved, streamlined administrative functions, increased staff at local offices, and less Federal regulations.

Last December, after this extensive public input, NRCS unveiled a far reaching reinvention plan. In addition to the field office closings and consolidations previously announced by former Secretary Espy, the plan calls for major restructuring above the field office level. The proportion of NRCS staff at the field office, customer service level will increase; operational functions will be delegated to the lowest level pos-

sible; headquarters operations will be reduced by over 50 percent; science and technology will be focused on areas important to our mission; the ability of NRCS to address multi-state natural resource and program delivery issues will be improved, particularly through the regional conservationists; technical support functions will move closer to where programs are carried out; and administrative and other support activities will be consolidated and streamlined. This restructuring will provide a more effective and responsive NRCS, at less cost, allowing the agency to maintain critical services even as staff and budget levels decrease.

Although not related directly to the reorganization, NRCS also conducted eight Farm Bill forums around the country last year. These offered another opportunity to listen to the grassroots and hear observations and recommendations about current and needed policies and programs.

The attached table provides a summary of the 1996 budget proposal for NRCS by program and account compared to the 1995 appropriation level.

Thank you, Mr. Chairman. We will be happy to respond to your questions.

NATURAL RESOURCES CONSERVATION SERVICE—FISCAL YEAR 1996 BUDGET

[In thousands of dollars]

Appropriation	Fiscal year 1994 actual	Fiscal year 1995 current estimate	Fiscal year 1996—			Total request
			Pay cost increases	Program changes	Other changes	
Conservation operations:						
1. Technical assistance	502,561	516,950	+ 8,660	+ 26,964	+ 1,699	554,273
2. Soil surveys	73,904	72,632	+ 1,166	+ 2,626	+ 311	76,735
3. Snow surveys and water forecasting	5,820	5,756	+ 72	.....	+ 24	5,852
4. Operation of plant materials centers	8,889	8,070	+ 94	+ 675	+ 36	8,875
Total, conservation operations	591,174	603,408	+ 9,992	+ 30,265	+ 2,070	645,735
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Wetlands Reserve Program	66,675	83,177	+ 126,823	210,000
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Watershed planning authorized by Public Law 566	10,921	10,546	+ 111	- 3,121	+ 6	7,542
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Watershed and flood prevention operations:						
1. Watershed operations authorized by Public Law 534:						
a. Technical assistance	17,785	9,920	- 9,920
b. Financial assistance for construction	22,921
c. Loan services	80	80	- 80
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Subtotal, flood prevention	40,786	10,000	- 10,000
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2. Emergency watershed protection operations	372,973
<hr/>						
3. Small watersheds authorized by Public Law 566:						
a. Technical assistance	72,278	59,827	+ 365	- 4,468	+ 23	55,747
b. Financial assistance for construction	100,098	.....	.....	+ 44,000	.....	44,000
c. Loan services	172	173	+ 80	253
<hr/>						
Subtotal, watershed operations	172,548	60,000	+ 365	+ 39,612	+ 23	100,000
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Total, watershed and flood prevention operations	586,307	70,000	+ 365	+ 29,612	+ 23	100,000
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NATURAL RESOURCES CONSERVATION SERVICE—FISCAL YEAR 1996 BUDGET—Continued

[In thousands of dollars]

Appropriation	Fiscal year 1994 actual	Fiscal year 1995 current estimate	Fiscal year 1996—		
			Pay cost increases	Program changes	Other changes
Colorado River Basin salinity control	13,783	600	.....	+ 2,081	.....
Forestry Incentives Program	12,820	6,625	.....	.....	.....
Water Bank Program	8,000	890	.....	— 890	.....
River basin surveys and investigations:					
1. USDA cooperative studies	7,820	7,523	+ 95	+ 793	+ 6
2. Flood plain management assistance	3,505	3,372	+ 43	— 2,418	+ 3
3. Interagency coordination and program formulation	2,157	2,075	+ 26	— 308	.....
Total, river basin surveys and investigations	13,482	12,970	+ 164	— 1,933	+ 9
Great Plains Conservation Program:					
1. Cost-sharing assistance	16,365	6,060	.....	— 4,060	.....
2. Cost-share programming and contract administration	2,974	2,916	.....	— 36	.....
3. Technical assistance	6,319	6,196	.....	— 76	.....
Total, Great Plains Conservation Program	25,658	15,172	.....	— 4,172	.....
Resource conservation and development:					
1. Technical assistance	29,772	30,321	+ 396	— 1,909	+ 32
2. Financial assistance	3,113	2,464	.....	— 2,464	.....
3. Loan services	60	60	.....	.....	.....
Total, resource conservation and development	32,945	32,845	+ 396	— 4,373	+ 32
Agricultural Resource Conservation Demonstration Program (Farms for the Future)	3,599	.....	.....	.....	.....

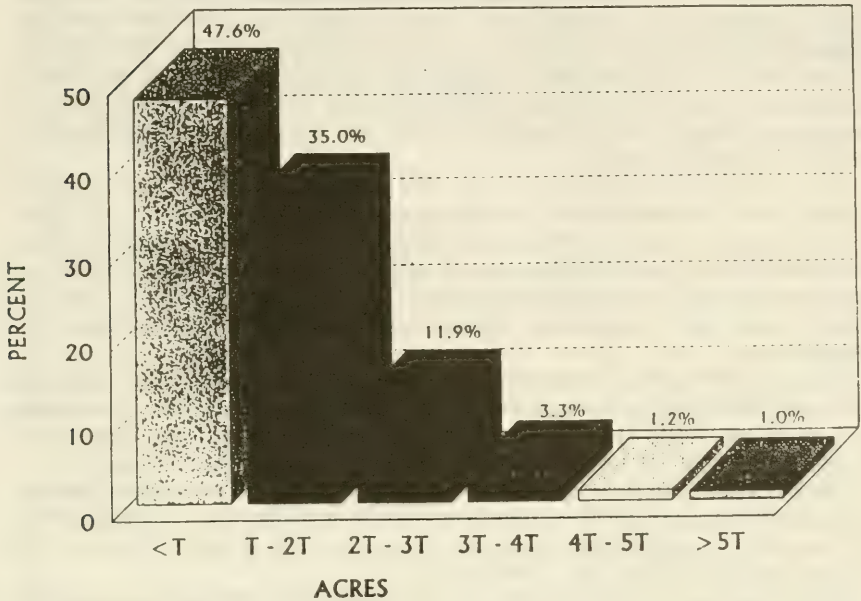
Subtotal, NRCS appropriated funds	1,365,364	836,233	+ 11,028	+ 174,292	+ 2,140	1,023,693
Rural Abandoned Mine Program	(13,233)	(7,853)		(-7,853)		
Trust funds	1,116	447				447
Total, Natural Resources Conservation Service	1,366,480	836,680	+ 11,028	+ 174,292	+ 2,140	1,024,140
Ceiling staff-years	13,327	12,784				12,457

Note: Fiscal year 1994 includes \$25 million in Emergency Watershed Protection funds that were made available in 1994 from the 1993 Supplemental Appropriations Act. The actual 1995 appropriation for the Wetland Reserve Program was \$92.3 million and for the Colorado River Basin Salinity Control Program was \$4.5 million. The technical assistance dollars for these two programs are reflected in the Conservation Operations Program.

FUNDS APPROPRIATED BY STATE AND LOCAL GOVERNMENTS FOR CONSERVATION PROGRAMS—
FISCAL YEAR 1995

State	State government	Local government	Total
Alabama	\$3,486,313	\$952,537	\$4,438,850
Alaska	185,405	40,000	225,405
Arizona	524,000	3,124,337	3,648,337
Arkansas	3,135,000	1,331,004	4,466,004
California	29,456,075	11,447,629	40,903,704
Colorado	912,051	680,688	1,592,739
Connecticut	1,837,781	665,418	2,503,199
Delaware	1,320,000	812,000	2,132,000
Florida	1,706,102	3,815,748	5,521,850
Georgia	7,729,241	8,625,400	16,354,641
Hawaii	702,000	195,700	897,700
Idaho	7,762,421	.....	7,762,421
Illinois	5,305,500	1,380,000	6,685,500
Indiana	7,149,864	3,999,652	11,149,516
Iowa	14,178,783	1,823,935	16,011,718
Kansas	12,468,811	10,917,235	23,386,046
Kentucky	3,907,700	3,357,850	7,265,550
Louisiana	3,962,405	796,000	4,488,405
Maine	237,968	266,469	504,437
Maryland	10,874,015	3,218,564	14,092,579
Massachusetts	1,272,056	314,243	1,586,299
Michigan	4,114,271	2,295,042	6,409,313
Minnesota	24,560,000	23,735,000	48,295,000
Mississippi	251,920	4,028,585	4,280,505
Missouri	31,879,054	218,156	32,097,210
Montana	3,180,000	1,450,000	4,630,000
Nebraska	7,701,886	41,728,626	49,430,512
Nevada	1,324,329	315,049	1,639,378
New Hampshire	245,000	285,791	530,791
New Jersey	713,000	3,605,000	4,318,000
New Mexico	756,069	1,939,446	2,695,515
New York	2,967,450	5,984,285	8,951,735
North Carolina	10,311,700	6,975,468	17,287,168
North Dakota	1,748,263	3,792,977	5,541,240
Ohio	11,754,836	7,025,611	18,780,447
Oklahoma	5,596,347	.....	5,596,347
Oregon	869,010	1,193,124	2,062,134
Pacific Basin .....	.....	.....	.....
Pennsylvania	5,742,000	5,286,340	11,028,340
Puerto Rico	2,979,026	1,542,258	4,521,284
Rhode Island	119,000	84,100	203,100
South Carolina	3,478,390	1,821,520	5,299,910
South Dakota	1,108,882	1,550,860	2,659,742
Tennessee	2,268,198	1,687,567	3,955,765
Texas	10,848,084	13,671,236	24,519,320
Utah	19,416,500	91,000	19,507,500
Vermont	320,000	137,000	457,000
Virginia	5,526,700	2,115,050	7,641,750
Washington	8,272,618	2,835,057	11,107,675
West Virginia	11,464,059	695,126	12,159,185
Wisconsin	5,402,000	13,840,000	19,242,000
Wyoming	534,500	1,687,000	2,221,500
Total	303,296,583	209,389,683	512,686,266

SUMMARY 1994 STATUS REVIEW RESULTS - DISTRIBUTION OF EROSION RATES AFTER FULL IMPLEMENTATION WITH RESPECT TO THE SOIL LOSS TOLERANCE VALUES
PRELIMINARY DATA AS OF FEBRUARY 9, 1995



BIOGRAPHICAL SKETCHES

THOMAS A. WEBER

Thomas Weber is the Acting Deputy Chief for Natural Resources Conservation Programs for the Natural Resources Conservation Service [NRCS]. Tom has held this position since December of 1994. Prior to that time, he held several positions in NRCS including soil scientist in Colorado, administrative trainee in North Carolina, budget officer and contract specialist in Washington State, assistant and State administrative officer in Minnesota, both assistant and deputy State conservationist in California, and State conservationist in New Mexico. He was born and raised near Wisconsin Dells, Wisconsin, on a 400-acre mixed crop/forest area. Tom holds a B.S. degree from the University of Wisconsin in resource management with a minor in forestry, a M.S.F. degree from Northern Arizona University in forestry, and a M.S.M. degree from Stanford University in management. Tom is married and is the father of two sons.

ROBERT K. REAVES

Robert Reaves is the Director of the Budget Planning and Analysis Division in the National Headquarters of the Natural Resources Conservation Service [NRCS]. Bob has held this position since March of 1995. Prior to that time, he was the senior budget analyst and acted as the Deputy Director of the division. He has been with NRCS since 1981. Before then, he worked for the Office of the Secretary of Agriculture as a budget analyst reviewing NRCS and the Forest Service budget proposals and activities. Over the past 38 years, Bob has also worked for the Internal Revenue Service as an operations Research Analyst and for the U.S. Geological Survey as a physical science technician. He is a native of Washington, DC, and holds a B.S. degree from Southeastern University with a major in business administration. Bob is married and is the father of two adult children.

USDA REORGANIZATION

Senator COCHRAN. The first question I have deals with the reorganization of the Department, specifically the activities and programs under the jurisdiction of your office. Can you tell us what the status of the consolidation and streamlining of the Department is as you see it, and what budget implications are there? Is this going to result in a request for additional funds? Are we going to achieve savings in the process? What are the budget consequences of the reorganization?

Mr. LYONS. Let me, if I could, Mr. Chairman, give you an overview from the standpoint of where we are in the Department, and I will focus somewhat where we are with regard to the two agencies under my jurisdiction, one of which is not in your jurisdiction, at least as far as appropriations go. Then I am going to turn to Paul to give you some idea of where we figure the cost savings will come from.

As you know, the Department of Agriculture stepped out in front in restructuring, and as a result of legislation, in which you were a key player in helping to get through the Congress, we have gone now from 42 to 29 agencies in the Department of Agriculture.

The Natural Resources Conservation Service came out of that reorganization plan as the successor to the Soil Conservation Service. It was not substantially changed, nor was the Forest Service, the other agency within my jurisdiction.

However, as a second step in departmental reorganization, we took it upon ourselves to begin the process of restructuring to become more efficient and more effective and provide more flexibility and more opportunity to promote conservation strategies for private lands with regard to NRCS and public lands with regard to the Forest Service.

Last December, we announced a proposal for changes in the structure of the organizations, as well as reengineering our business practices, and for downsizing the organizations to reflect budget realities and our need to reduce the size of the Federal work force. We anticipate, shortly, we will be able to present our final recommendations to the Congress for how these changes might go about.

NRCS REORGANIZATION

I think one of the key components of the restructuring and reorganization within the Natural Resources Conservation Service is a significant reduction in the Washington office staff. We actually propose to eliminate one-half of the employees in the Washington, DC, office and to go to a regional structure which will provide us greater flexibility in tailoring policies and programs to meet the needs of each individual region.

The delivery system for conservation, though, will remain with the State conservationists, and ultimately, we hope will be enhanced by our ability to slightly increase the number of employees who will be back in the field providing the conservation technical assistance, which is so valued by our customers, the private landowners, across the country.

I will let Paul or perhaps Pearlle address some of the cost savings that we believe will be a part of this over time.

Senator COCHRAN. When do you estimate that the reorganization will be complete?

Mr. LYONS. I am going to let Paul get into the details of how we are going to proceed, but we anticipate that our reorganization will be largely complete this next fall as far as NRCS goes.

Mr. JOHNSON. I would like to pass that question on to my associate, Pearlle Reed. He has been in charge of our actual restructuring and I think can give you some very detailed answers to that question. Pearlle.

Mr. REED. Thank you, Mr. Chairman.

With respect to your question on how much it is going to cost and whether or not we will be requesting additional funds, we estimate that it will cost approximately \$50 million to fully implement the NRCS reorganization. However, we estimate also that there is a cost of about \$20 to \$30 million that we would normally incur as a matter of operations, like transfers. So, that will offset that \$50 million by that figure. At this point in time, we believe that we can fully implement our reorganization plan with existing resources.

As it relates to the timeline, we are planning to begin full implementation of our reorganization on October 1 of this year, and plan to be about 90 percent complete on or about January 1, 1996.

NRCS AND FOREST SERVICE CONSOLIDATED MISSIONS

Senator COCHRAN. I noticed that under the reorganization plan, the administrative functions of the NRCS and the U.S. Forest Service are to be consolidated on a mission area basis. Have these functions been combined at this point?

Mr. REED. No; they have not. What we were required to do as part of the USDA reorganization is to have a consolidated administrative function for each mission area, and within the conservation mission area, we recently completed our plan and provided that to Under Secretary Lyons. Basically, that plan provides for us to share everything that we can within the conservation mission area at the national level, and it also provides the flexibility for us at the regional level, as well as the State level, to share resources with the other USDA agencies so that we can maximize efficiency.

Mr. LYONS. I should point out, Mr. Chairman, that our goal there, obviously, is to reduce the administrative costs. We are not promoting the consolidation from the standpoint of uniting NRCS and the Forest Service functions, but rather would take a lead agency approach where, for example, one agency might have responsibility for certain administrative functions, payroll, procurement, et cetera. The other agency might take the lead in providing other kinds of services such as employee training dealing with EEO issues, et cetera. So, it is really an attempt to reduce redundancy and to limit the need for making duplicative investments in the administrative functions of both agencies.

Senator COCHRAN. Have there been equal savings projected for both NRCS and the Forest Service?

Mr. LYONS. We are actually in the process of analyzing what the savings from these administrative initiatives would be, Mr. Chairman. So, it is premature for me to answer that. I do not know if

I could make a comment about equal savings because we have tried to look at our administrative costs overall and what would be the most efficient way to reduce those costs while providing the kind of administrative services that are necessary for the organizations to function.

Senator COCHRAN. Well, in looking at the budget request, it is hard to figure out what savings are being achieved in the reorganization. Mr. Reed says that they pretty well offset the expenses that you are going to incur. You will not have to request additional funding for the reorganization, as I understand it.

Mr. LYONS. That is correct.

Senator COCHRAN. I am just curious as to where those savings show up.

Mr. JOHNSON. Well, Mr. Chairman, first of all, we have to go back a year when we started this process. In the last year, we have used the buy-out and lost almost 1,400 people from our agency. Now, many of those people were part of many of the programs that were cut very severely last year.

Our goal for restructuring is to make sure that we increase the number of people that we have at our field office level.

So, in terms of savings, I think we have already taken a great deal of that by reducing our FTE's by over 1,000. There have been close to 1,400 in the buy-out. The goal is to keep as many people as possible in the field.

In our overall goal, we will have about 76 percent of our people in the field when we are done with this as opposed to the 70 percent we had when we went into this, but we will have fewer people. We could use a lot more.

DOWNSIZING

Senator COCHRAN. Is downsizing occurring?

Mr. JOHNSON. It certainly is.

Senator COCHRAN. That is part of the challenge of reorganization, reduce the numbers so that ultimately we will not have as big a payroll as we did in the past. That is the big expense.

Mr. JOHNSON. That is right, although—perhaps I should not say this, but we have the work out there for an awful lot more employees than we have. But, yes, the restructuring is downsizing and making sure that as we do it, we service the people in the field and not people here in Washington.

Senator COCHRAN. Yes; well, you know a fact of modern reality is that fewer people are needed to do as many of the functions in most jobs as in the past because of technology, communications technology, computers. A number of things have come along to make us all more efficient if we take advantage of the technologies that are out there. Is the Forest Service and is NRCS taking advantage of these new technologies in a way that will cut costs?

Mr. LYONS. We are, Mr. Chairman. We are doing our best to take full advantage of the technologies. I think one of the things, though, that is a reality we have to face is the job of providing conservation assistance on the ground is a one-on-one job. One of the things that we heard from the 1,000-plus forums we held last year across the country with farmers and ranchers and our other customers was that they wanted to have that kind of assistance and

service. They were, in fact, less concerned about things like cost share assistance, et cetera, as they were being able to contact someone who could come out and help develop a conservation plan.

There are technologies that help us do that, mapping technologies, information systems, and one of the reasons for proposing some linkage between the Forest Service and NRCS is to take advantage of those technologies. A common GIS system, for example, and a common information base will help us get there.

WETLANDS DELINEATION

Senator COCHRAN. How many people are now involved in the wetlands delineation effort?

Mr. JOHNSON. I would like to pass that on to Mr. Weber who is in charge of our programs.

Mr. WEBER. Mr. Chairman, essentially those field offices that currently have wetlands activities—we are providing assistance to them on a request basis to delineate their wetlands at this point. Those numbers I would say I could only guess at at this point, sir. We could get back to you in more detail on that later.

Senator COCHRAN. I am told that there is a good deal of suspicion and concern among landowners in the Midwest and elsewhere that the delineation effort that is underway right now is concentrating on the minutiae of delineation and maybe identifying lands or parts of fields as wetlands that have never been considered wetlands in the past by anybody under any definition. There is a great deal of concern and disturbance and anxiety out there I am told from fellow Senators who are anxious to see us monitor this and make sure that the Department does not get carried away in its zest to identify every soft spot in the field as a wetland and put the whole farm out of business in the process.

I asked the Secretary-designate this question yesterday at our first confirmation hearing in the Agriculture Committee and suggested that he consider a moratorium or a freeze in the action until he could personally review the situation and find out what was going on.

Tell me what is going on.

Mr. JOHNSON. For one thing, we are waiting for him to come on board.

What is going on right now, over the past 10 years with the swampbuster provisions and our responsibility in those, we set out back in the late 1980's to do wetlands determinations and certifications to let farmers know what their responsibilities were in relation to swampbuster and the wetlands provisions.

As you know, this whole issue has been bounced back and forth quite a bit over the last 10 years. Now we are on, now we are off. And farmers have been feeling the same way. Who is responsible? Who is in charge?

About 1 year ago, the four agencies that do deal with wetlands came together and signed a memorandum of agreement on those responsibilities and put us in charge of croplands in the country.

We have now gone back and are taking a look at the designations that we made back when we got started—and we did not finish the job back then—with the idea that we would take a look to

see whether or not the new protocol fits with what we did at that time.

We are in the process of doing that right now, and from a general look at it, I think that what we are finding is that in some cases perhaps we designated too much in the area of wetlands, and in other areas, based on our agreements right now, perhaps it was not exactly right. So, we are in the process of doing that now.

But we are also in the process right now of discussions on whether or not we should continue wholesale wetlands determinations or wetlands determinations on demand by the farmer. The farmer still has the responsibility under 404 and under the swampbuster, and our goal is to work together with him on that.

SWAMPBUSTER

Senator COCHRAN. Has there been any proposal by your office for a change in the swampbuster provision in connection with writing of the new farm bill this year?

Mr. LYONS. We are looking at a number of options, Mr. Chairman, by which we can improve the flexibility for implementation of swampbuster, and these are matters that are being discussed now with the White House, as well as, as Paul said, we are anxious to get the Secretary on board so we can have these discussions with the Secretary. As you are well aware, we are hoping to get information to the authorizing committee as quickly as possible so we can begin this discussion over critical titles, like the conservation title.

I want to point out two things, though, that relate to the wetlands issue.

I believe it was last year a great deal of concern was initially expressed by the Congress with regard to the degree to which the agencies responsible for dealing with wetlands, which are primarily the Natural Resources Conservation Service, the EPA, and the Fish and Wildlife Service, and the Army Corps of Engineers, work together or did not work together on these issues.

So, when we first took office, we initiated a process of trying to determine mechanisms where we could improve that coordination, come up with common training, a common definition for wetlands, and give some clear jurisdiction on issues related to wetlands delineation. The jurisdiction for agricultural wetlands was given squarely to NRCS, and I think we are up to the challenge to try to provide more certainty and I think a simplified process to help producers get through the issues of delineation.

But one of the areas of considerable concern right now has been the certification process which I would suggest is somewhat ironic. In the debate in the 1990 farm bill, the House included a provision to provide for certification of wetlands on a producer's lands so as to provide that measure of certainty. The concern at that time was that producers were not certain what wetlands they were responsible for and the wetlands they were not.

Clearly, there have been some problems in the implementation of that provision, and we are reevaluating the manner in which we can do this so as to achieve the goal of providing the producer certainty, to eliminate this concern that he or she be able to operate on their lands without fear of sanction under swampbuster or other wetlands laws.

WETLANDS DELINEATION

Senator COCHRAN. What is the amount in the budget being requested for wetlands delineation activities this next fiscal year?

Mr. JOHNSON. We are requesting \$15.6 million.

Senator COCHRAN. How does that compare with the amount spent during this fiscal year or projected to be spent?

Mr. JOHNSON. The numbers I have here are about \$15.6 million this year.

Senator COCHRAN. What is the reason for the almost doubling in the amount? Is there a policy change that is reflected here, or just more farmers requesting you to come out and look at their land?

Mr. JOHNSON. No; it is not that. It has to do with, as I mentioned, the memorandum of agreement and then training our people to be able to work with wetlands. So, this whole year, we have been working primarily on training, and there is some wetlands determination going on right now. If we continue with the wholesale determination of wetlands on the agricultural lands, we estimate about \$15 million.

Senator COCHRAN. Has there been any projection about what fiscal year 1997 would bring in the way of appropriations for this program?

Mr. JOHNSON. No projections have been made for fiscal year 1997 concerning this program.

Senator COCHRAN. What if you decide to go forward and you get the Secretary's approval to go forward with what you call the wholesale delineation effort? What would that cost in fiscal year 1997?

Mr. JOHNSON. We do not have figures, but it probably would not be too much different from the 1996, perhaps some less.

I would like to make a comment on this whole wetlands issue that wetlands are an important part of the landscape and that farmers have and always will work around wetlands. With the Wetlands Reserve Program and with other similar programs, we think that farmers will, on a voluntary basis, want to restore wetlands.

Part of what we are doing right now, I think, is bringing a top-notch staff of people across the country up to a better understanding of how wetlands do fit into a landscape. So, any money that we have spent thus far dealing with this—I am sure that in the future we are going to continue to work together with landowners on this. As we deal with water quality issues, as we deal with wildlife habitat on private lands and so on, wetlands are going to be an important part of it. So, I see in our future certainly continuing to work with farmers on these issues.

WETLANDS RESERVE PROGRAM

Senator COCHRAN. Is the Wetlands Reserve Program meeting your expectations and do you feel that you will recommend the Department support a continuation of this program in the rewriting of the new farm bill?

Mr. LYONS. I want to address that question directly, Mr. Chairman. I just want to make a comment about the expenditures for the wetlands delineations.

One of our goals, as I know it is one of the goals of the Congress and producers, is to get that issue behind us. We have about 65 percent of our work completed in terms of delineations. So, the funding that you see projected out for 1996-97 would hopefully be sufficient funds to complete that remaining 35 percent so we could finally put that issue to rest. The MOA and the working agreements we have with the other agencies are intended to come up with a system that provides consistency. It is an issue we would like to resolve.

With regard to WRP, we think it has been a highly successful program. Apparently producers do too because we have far more requests for enrollment in WRP than we have resources. You see that our budget request includes a significant increase in funding for enrollments in WRP simply because we want to capitalize on what we think is a very successful program.

Certainly there are elements of WRP that we will want to visit with the Congress in the 1995 farm bill. One of the issues that was debated in 1990, and I am sure we need to discuss again, is the issue of permanent easements versus temporary easements and what provides adequate flexibility so that we can help landowners who want to enroll their lands in some sort of protective program like WRP get there so that current program rules and requirements do not act as a deterrent to get there.

Senator COCHRAN. I understand that there is about \$47 million of WRP funds which for some reason have not been obligated for the acreage they were originally intended and that the NRCS may be planning to reallocate those funds. This happened last year, as I understand it, as well.

What methodology will be used to allocate these funds, and can you explain what has happened and how this has happened?

Mr. JOHNSON. Yes; presently, we have a backlog of well over 200,000 acres. In fact, my numbers range—and I do not have the exact figures here, but it is well over 200,000 acres that have been offered up that we have not been able to—we have not had the funds up until this point to deal with the easements on those. So, in the States that we have been using the Wetlands Reserve Program in, what we would like to do right now is to go back and take a look at those high-priority wetlands that have been offered and put some of these funds to it. Of this, there is a small amount of carryover from 1994, and what we would like to do is to move ahead right away with some of the 1995 funds to work on that backlog. We are also putting together rules to make the program more flexible and to allow every State to utilize it.

So, we expect in May to come forward and bring the rest of the 1995 appropriations to bear on the issue. But there is a huge backlog out there, and we want to go back and we want to work on that.

Senator COCHRAN. There were 600,000 acres offered for the program, according to the fiscal year 1994 signup. In your statement, you say that the number is 200,000 acres. Obviously, that is a substantial reduction in the backlog. Are those correct numbers?

Mr. JOHNSON. Yes, but a lot that was offered in the first sign-up was not eligible. So, what we are talking about in the backlog right now is eligible acres.

Senator COCHRAN. When we had our hearing last year, Mr. Grant Buntrock said that the goal was to reduce the cost per acre of this program by \$86 per acre. I do not have the cost that it was and what the projection or the goal was to be. I am curious about whether we have made any progress in reaching that goal during this year.

Mr. JOHNSON. We can supply you with the exact figures on that. I think our estimated costs right now are about \$800 per acre for WRP and \$760 for the Emergency Wetlands Reserve Program. But this is an average across the Nation, and it depends on where you are, as you know. In some places if we want to preserve high-quality wetlands, it is going to cost more than in others. The figures that I am giving you here are an average for the country, but I can give you more specifics on that.

Senator COCHRAN. I am going to ask you to submit for our record, so we can have a detailed analysis of this program, a State-by-State showing of how the funds in the program are allocated and the cost per acre of lands enrolled in the most recent sign-up.

Mr. JOHNSON. We will be happy to give that to you.

[The information follows:]

WETLANDS RESERVE PROGRAM ALLOCATIONS

State	Allocation amount	Acres
Arkansas	\$8,190,000	11,500
California	3,000,000	2,900
Illinois	1,000,000	1,500
Indiana	1,000,000	1,100
Iowa	4,500,000	7,900
Kansas	1,000,000	1,700
Louisiana	8,000,000	14,000
Minnesota	500,000	1,000
Mississippi	9,250,000	18,500
Missouri	2,000,000	2,900
Nebraska	250,000	300
North Carolina	1,000,000	1,000
Oregon	1,000,000	1,000
South Dakota	1,000,000	2,000
Tennessee	500,000	850
Wisconsin	1,000,000	1,200
Total	43,190,000	69,350

WETLANDS RESERVE PROGRAM COST PER ACRE BID

State	Acres bid	Number of intentions	Estimated acres for enrollment	Estimated average cost per acre
Arkansas	71,539.0	462	11,229	\$532
California	48,474.5	141	3,882	1,172
Illinois	24,032.0	374	2,599	656
Indiana	14,266.4	405	1,850	684
Iowa	58,084.4	1,069	6,060	799
Kansas	13,676.7	273	2,400	428
Louisiana	83,969.9	328	10,998	565
Minnesota	31,277.0	390	3,500	400

WETLANDS RESERVE PROGRAM COST PER ACRE BID—Continued

State	Acres bid	Number of intentions	Estimated acres for enrollment	Estimated average cost per acre
Mississippi	91,579.7	370	12,775	509
Missouri	28,432.8	443	4,085	627
Nebraska	6,571.4	148	1,550	649
New York	2,708.3	63	774	755
North Carolina	3,053.2	19	1,636	597
Oregon	15,786.3	62	1,495	858
South Dakota	39,921.5	509	3,049	449
Tennessee	11,507.8	118	1,648	574
Texas	9,457.5	37	2,053	481
Virginia	10,501.3	110	899	1,074
Washington	3,113.0	42	492	1,815
Wisconsin	22,067.0	412	2,008	656
Total	590,019.7	5,775	74,962	N/A

WETLANDS RESERVE PROGRAM

Senator COCHRAN. Do you expect making a specific recommendation for any modification of the Wetlands Reserve Program?

Mr. JOHNSON. For one thing, we would like to offer it in all of the States, and so we would be expanding to all States.

Senator COCHRAN. How many States do we have now in the pilot program?

Mr. JOHNSON. We have 20 States in the pilot program right now.

Senator COCHRAN. Twenty.

Mr. JOHNSON. Yes, sir; that's correct.

Senator COCHRAN. We have expanded that from time to time.

Mr. JOHNSON. Yes, Mr. Chairman; that is correct.

Senator COCHRAN. I think we started out with six.

Mr. JOHNSON. I believe it was eight pilot States.

INVENTORY AND ASSESSMENT

Senator COCHRAN. Let me ask you about the possibility of duplication in this inventory and assessment of the status condition of America's natural resources on all non-Federal lands. I know that your office is conducting a comprehensive inventory.

To what extent is there duplication between your effort and the Department of the Interior's National Biological Survey?

Mr. LYONS. I will be glad to address that, Mr. Chairman. I cannot tell you that. I would suggest that there certainly is a need to improve coordination, but I think the biological survey's roles and responsibilities are still being fleshed out to some degree.

We are interested in improving efficiencies in the Department of Agriculture with regard to natural resource inventories, and actually, for that reason, I have asked both the Chief of the Forest Service, Jack Thomas, and Chief Johnson to recommend to me measures whereby we could come up with a single natural resource inventory for the Department. As you may be aware, we currently conduct inventory and assessment activities under the Rural Development Act and the Resources Conservation Act for the Natural Resources Conservation Service and under the Resources Planning

Act for the Forest Service. While the NRCS work primarily focuses on private land, the Forest Service work on public land, there is a great deal of overlap, and we are working hard now to come up with consistent terms and definitions and mechanisms whereby we can come up with one solid natural resource data base which would serve both agencies as well as the entire Government.

Senator COCHRAN. What is the budget request to conduct this inventory and assessment?

Mr. JOHNSON. Mr. Duesterhaus is in charge of our technology, and I would like to turn this question over to him.

Mr. DUESTERHAUS. Mr. Chairman, that amount is included in our "Conservation operations" account, and you may not find the specific number. I can provide you the specific number if you would like, but it is on the order of \$8 or \$9 million as a part of the "Conservation operations technical assistance" account.

Senator COCHRAN. That would be good to know. I assume the technical expenses are in—do you use satellite time, do you have photography? How do you do this?

Mr. DUESTERHAUS. A considerable amount of the work, sir, is done by remote sensing, utilizing the latest technology. Approximately one-half of the country, when we did this last time in 1992, was done by remote sensing and teams of remote sensors. Satellite imagery is very valuable.

Under Secretary Lyons has charged us to drive in the direction of using newer technology and working with the other agencies, and we have filed with him a coordinated plan to do that. We are carrying out a pilot program this year with the Forest Service on the ground to test some of those new models.

Senator COCHRAN. It would be good I think just for our information to have a figure, if you can supply the committee with one, as to how much this is costing and what you spent this year and what the projections are for next year.

Mr. DUESTERHAUS. We would be happy to, Mr. Chairman.

[The information follows:]

NATURAL RESOURCES INVENTORY

The budget for the Natural Resources Conservation Service's resources inventory program has been \$8,462,000 for the past several years. These funds are currently a part of the Agency's Conservation Operations Technical Assistance account. During 1992 and 1993, additional funds not directly designated for the Natural Resources Inventory (NRI) totaled \$8,000,000.

We project \$8.4 million will again be designated for resources inventory work in fiscal year 1996.

The pilot program being carried out in fiscal year 1995 with the Forest Service has a budget of \$450,000 (combined funds). We are planning a fiscal year 1996 follow up to this study to continue this coordination effort that will cost \$1.3 million.

NATURAL RESOURCES INVENTORY

Senator COCHRAN. How much of this has already been done? Where are we in terms of the completion of the effort that you have in mind?

Mr. DUESTERHAUS. The natural resources inventory work of the entire Federal Government, including the Natural Resources Conservation Service, is a continuous process of monitoring how we are doing, the status and condition of the resources. So, we do periodically, in our case every fifth year, we do a countrywide scan of the

status of erosion, the status of land use, the status of a number of variables, a couple dozen variables. We now have a trendline on that from 1977, 1982, 1987, and 1992. Our next projected scan will be in 1997. We do do some individual 1-year scans in between those 5-year timeframes.

Mr. LYONS. I would point out, Mr. Chairman, as you know, this is one of the areas where, as we reduce Federal expenditures, reduce staffing, we can realize tremendous efficiencies. I would suggest to you the most recent information from the natural resources inventory related to wetlands, one of the values of that information, according to the NRI data which now this last survey allows us to establish a trendline for certain activities, such as wetland loss. We determined that agricultural wetland loss, the loss of wetlands due to agricultural production, was down to 31,000 acres a year for the period of 1982 to 1992. If you throw into that our efforts to enroll acreage in the Wetlands Reserve Program, I would submit to you that we may have actually turned the corner and reached the goal that was actually established originally by the Bush administration of no net loss. I think that is an encouraging trend.

Senator COCHRAN. It is indeed. Most of the wetlands loss occurs in the coastal areas.

Mr. LYONS. Although I know my duck hunting has been a lot better.

Senator COCHRAN. Pardon me?

Mr. LYONS. I know my duck hunting has been a lot better, so certainly we are doing something right.

PRIVATE PROPERTY RIGHTS

Senator COCHRAN. The program that we have for protecting wetlands and keeping them from being converted has obviously been working. There is no question about that. According to some figures that I have here from the Competitive Enterprise Institute, conversions of agricultural wetlands have decreased by over 90 percent in the past 30 years. I assume that is correct. You never know who to trust with numbers these days. Everybody is selling something usually when they give you a number. So, you have to watch out. So, I think it is certainly an effort that has proven to be effective.

The National Biological Survey, as you know, has come under some criticism. Not everybody understands what is going on. I think that is one problem. There are these suspicions and concerns because of a lot of the unknowns. For example, how are private property rights being taken into account, and what efforts are made to respect those rights?

In connection with your inventory and assessment, do you have in place any standards or guidelines to help ensure that private property rights are respected?

Mr. LYONS. Rich can answer that.

Mr. DUESTERHAUS. Yes, Mr. Chairman; in terms of our visits and in terms of our data, the privacy of the individual is absolutely protected. We divulge that to no one, and the landowner allows us on his property. We do not trespass. We have kept the names out of the data base so that it is a statistical data base, not one that relates back to a landowner.

FLOOD CONTROL STRUCTURES

Senator COCHRAN. One concern I have specifically with your prepared testimony, Mr. Johnson, is your agreement that the use of flood control structures and the like are out of date. These are not good management tools. They are destructive of the natural processes and functions of the land. I may be exaggerating what you said, but that is the impression I get.

Is that why you have submitted a budget request for the small watersheds program representing a 53-percent decrease from the fiscal year 1994 appropriation?

Mr. JOHNSON. No; and I think you are misreading my comments. Actually, what we are requesting this year is \$30 million over last year's. Last year, we came in and we were considerably less than what we were the year before. I happened to come in right at the start of that. I have asked for an increase, and the administration has agreed that we should have an increase in the watershed program.

My comments really referred to—we learn as we go along on how to do flood control, and believe me, I feel very strongly about the need to do that. But there are alternative ways very often to do it. I have asked that we take a good look at our program. We will still use structures where appropriate, but in some cases we know today that we can do it using less structures than we did in the past.

We are doing a review of it right now, working together with sponsors, and they are really their projects, not ours. We have gone out and we have looked at the backlog. As you know, there is a huge backlog. We have, together with the sponsors, agreed that about 500 dams do not have to be built on these projects. We have also agreed with them that we can reduce the amount of work in channels by over 2,000 miles.

So, it is a process we are going through together with the sponsors to try to look at alternatives. We will use structures where structures are appropriate, and we will use other means where other means are. I think it is essential that we do that. And we all learn as we go through this process.

Senator COCHRAN. One concern that I would have in trying to communicate with the constituents I represent is to explain to them that there are some in the administration now who are suggesting that flood easements are better than levies. When you are in Mississippi, you are in pretty low country in a lot of the Mississippi Delta. When you are talking about a flood easement, you are talking about the entire Mississippi Delta. So, that means there is somebody up here in Washington who has determined that the best use of the Mississippi Delta is to flood it.

Is that a legitimate concern? Was that something that you would endorse?

Mr. JOHNSON. I think in each project we need to work together with the sponsors of these projects, and in some cases easements on flood plains work and in others they do not. You cannot buy out a shopping center, for example, and put it back into a flood plain. So, in those places we would use structures. It really depends on the area and the issue.

This program has been evolving over many years now, and every year we bring in new techniques and new ways to do it. But again, we work with the sponsors on this, and we try to come up with those methods that are most environmentally friendly. We are looking at projects that provide as many environmental benefits as possible and also do the job. I think you have to look at each project with that in mind.

Mr. LYONS. The point, Mr. Chairman, is no one inside the beltway has dictated that as a national policy easements are better than structures. It really does need to be looked at on a local basis working with the sponsors on the ground. I want to make that abundantly clear.

We are trying to get away from the one-size-fits-all approach, and while in the past emphasis may have been placed on structures. If that is appropriate, then that is the appropriate tool we will use. If it is some other mechanism, designed with individual landowners and project sponsors, then we will go that route.

Senator COCHRAN. I have some questions I am going to submit about the specific request for appropriations in this area and whether or not States are contributing as had been projected or expected in the administration's testimony in the hearings last year.

I am now going to yield to my distinguished colleague from Nebraska for any comments or questions he might have.

Senator KERREY. Thank you very much, Mr. Chairman.

PRAISE FOR NRCS

I am here I guess as much to praise you, Mr. Johnson, and what you have been doing at now the newly named Natural Resources Conservation Service [NRCS]. It is a common argument today that Government has failed to do *x*, *y*, and *z*, whatever it is that we are paying attention to at the moment, and I think it is very important for us to do some telescoping back to examine progress that we have made, where progress has occurred.

There has been tremendous progress made in resource conservation in this country. You can see almost with any snapshot of time. If you take a 10-year view, a 20-year view, a 30-year view, you see tremendous conservation having occurred. Since you only have one shot at soil—once gone, it is gone. At least I have never seen any successful efforts at rehabilitating lost topsoil in an economical fashion anyway. We still have not figured out how to haul it back up from the Mississippi Delta. [Laughter.]

CONSERVATION ON PRIVATE LAND

So, you only got one shot at doing it, and it is a resource that is most critical.

What it seems to me we are faced with is a challenge that I have heard you describe quite coherently and that is you are trying to do conservation on private land. That is the dilemma. If this was all owned by the Government, it would be relatively easy to do because if it was all owned by the Government, we would not be making any money on it. We would not be farming it. But we have got private land out there, and we are trying to do conservation on it. We are trying to both provide incentives, as well as provide re-

sources, to increasingly financially strapped small businesses, and even the big ones are relatively small.

So, you got a small business out there, a small manufacturing business, plants in the spring, harvests in the fall, still has to pray in between to make sure they get good weather. If you do not get good weather, you do not get a good crop. So, they have got bankers breathing down their necks. With great respect to Mr. Lyons and whoever it is at USDA, you have regulators breathing down your neck. You have got this whole political argument going on right now, and you wonder if the politician knows anything which requires a bit more than just prayer to get done.

So, you try and do conservation, and there has been spectacular work done. I think there is great interest amongst at least the farmers that I represent to do more conservation. Now, sometimes it is conservation for economic reasons. We see lots of, as you know, younger farmers now getting very interested in minimum or zero till agriculture, and it is an economic issue that is driving it. But it accomplishes conservation nonetheless. It ties it, it dovetails to a conservation strategy.

CONSERVATION RESERVE PROGRAM

I wanted to as much alert the committee and to talk to you a little bit as well about two projects that you and I have worked with, and one is trying to get the States to be more involved in the CRP Program and trying to go the last few steps—and they are going to be the most difficult steps now—with the wetlands management.

As to the first, I want to be clear with you I do not favor block-granting out the CRP money. I think that would not be a good thing for us to do. I am open to any creative plan that a State comes up with, particularly where they are willing to match the money in some fashion, because I think we are apt to discover some pretty innovative ways to do things.

Specifically, I see two areas where there are potential benefits. One is the one we were talking about which is conservation. Most States have conservation plans and they are putting State money, as well as local money, into this conservation effort on private property.

The second area is we have discovered economic benefits from the cover, and so I have got a whole big wing of tourism people, Ducks Unlimited, Pheasants Forever, those sorts of folks. So, I can dovetail this now into an economic development strategy.

The difficult question, though, is which lands are going to be enrolled and under what price. Now, Senator Lugar in our agriculture hearing said maybe a quarter of the land—I think was the number that he had—might be enrolled and it is not highly erodible.

Well, that is true but in part that is a consequence of a decision that Congress made to expand the Conservation Reserve Program and to enroll lands other than just highly erodible. I cannot remember the phrase of art—other environmental benefits or something like that, which by the way, can make good sense in a watershed where you are concerned about water quality. It may not be highly erodible, but to enroll it in a CRP for the purpose of improving water quality, may make great local sense. It still does not make it any easier to make the decision.

I am just curious, Mr. Johnson, if you have given any thought to how do we establish a partnership. Nebraska is moving forward. The locals are moving forward. We had one meeting with you and Mr. Buntrock and we followed that with a meeting with the stakeholders, that is to say, the property owners in particular. We have had several meetings with the State and local governmental entities, and I think we have got the why part worked out, which is what we are trying to answer first. Why are we doing this? What is the purpose? Where are we trying to go over the next 10 years?

Now we are left with the how, and that is where I hope we can get your help because I know you have got experience both in the Iowa legislature and as a farmer and now at the Federal level. If we can get the how part worked out, I think we can show the taxpayers much more bang for the buck and accomplish over the next 10 years more conservation, more cover, more economic benefits as well.

FEDERAL/STATE PARTNERSHIPS

So, it is an open question about how do we put a partnership together that has the Federal Government providing some of the resources, has the States I think required to be a partner? If they are going to be a partner, they ought to put something up. Specifically, how do we get to a point where decisions are made about which lands to enroll so that 10 years from now we say we enrolled the right land?

Mr. JOHNSON. First of all, thank you for the kind comments on the good work that has gone on over the past few years in conservation. It really should be, and I think was, directed to the millions of private landowners across this country and the accomplishments they have made, the conservation districts, and the 12,000 to 13,000 employees that we have. I think they are the finest in the world. There is no agency like this. I am proud to be part of that.

In terms of CRP, I can recall back 10 years ago when it began, and I was in the Iowa legislature and at that time was an appropriations chair for agriculture and natural resources in fact. So, I know what you are going through in having to make tough decisions.

I was somewhat frustrated at the time because I saw this very large program coming in, and in our State it turned out to be about \$160 million a year for conservation in the State.

Senator KERREY. It is about \$60 million in Nebraska. Close to \$70 million actually.

Mr. JOHNSON. The whole budget I was dealing with for the whole State in natural resources was about \$20 million. So, you can see the powerful impact that this would have. I thought at the time—in fact, I thought block grants, I will have to admit. But what I really thought was that if we could have States more involved in setting priorities on programs like CRP—and I would certainly like to work with the committee and certainly with the Secretary, as he comes on board, to talk about some of these ideas because I have found that if you get local people and you get States involved, conservation means so much more and it can be targeted so much better than what can happen from far away.

We talked about the State technical committees which were authorized in the 1990 farm bill, and we would like to move ahead and establish those. Those would be a broad range of technical expertise within a State, including all the State agencies associated with conservation issues and the Federal agencies, to try to set some priorities for a State.

We looked at Nebraska a little while back and there is the Loess Hills with high erosion problems. There is the Sandhills of Nebraska with center pivot irrigation that really needs to get some land back into grassland. There is the Platt River water quality. And every one of our States has these kinds of things.

CONSERVATION RESERVE PROGRAM

After 10 years of conservation compliance, we know where the real difficult areas are today. Could we, together with States, try to target some CRP to take that next step to get those real tough areas into more sustainable kinds of systems? I think there are terrific opportunities to do this.

It is not easy. Even within States, agencies argue about who should take charge and so on. But I think using a program like CRP and bringing the parties to the table, we could agree very quickly. Well, maybe not very quickly, but we could certainly agree on where our real important issues are within States.

I would argue that interest groups ought to be involved as well, the commodity groups, the environmental groups, and so on, at the local level. They know certainly better than we do here what the real needs are out there.

Senator KERREY. Mr. Johnson, do you think it would be either reasonable or possible to come into, let us say, Nebraska and say—we have got I think it is \$67 million of CRP contracts—and say are we getting our money's worth? It is Federal money. Are we getting 67 million dollars' worth of conservation? Are we getting 67 million dollars' worth of overall benefits—conservation and economic are the two that come to mind—and to get an analysis that might lead to a discovery of a way to do it better?

Mr. JOHNSON. There have been a number of those studies done over the last few years. That is one question, and certainly we ought to be doing that. But the other is how, if we are going to have another CRP, we can get even more return than what we got the first time around.

PARTNERSHIPS

Senator KERREY. We have had several discussions at home and the last one that we had where we were wrestling with the why, we actually invited a facilitator to come in because people will talk to a facilitator differently than they will talk to me. When they talk to me, they are hammering and blaming me for everything, including original sin. So, in this kind of an environment, I was able to be more of a participant than a chairman.

One of the ideas that came to my mind during that deliberation was the possibility of going part way on a block grant. I want to make it clear. I am not ideologically opposed to block grants. I am just not convinced at all that the States are prepared to assume the responsibility for making these decisions. But maybe we could set

aside 10 percent for matched State programs. Maybe we could take a small bite in 1995-96 and try it out, try some experimentation out there, engage the Governors.

What you do is you broaden the base for conservation. In our meeting we had a whole range of people excited about the possibility of being able to get more involved. And they can see progress. If they, let us say, enrolled some land that is not currently enrolled for the purpose of enhancing a game and park strategy or for the purpose of enhancing a local watershed policy, they can see some real gain from it. I am afraid that right now you have too narrow a band of advocates for the CRP Program.

So, I am just curious how you feel about the idea of perhaps taking 10 percent of it and setting it aside and challenging the States to come up with some matched response to the Federal program.

Mr. JOHNSON. Jim is wanting to say a few things.

CONSERVATION AND CONSERVATION ACCOMPLISHMENTS

Mr. LYONS. I am champing at the bit to say one thing, Senator, and that is, as you know, because Nebraska has been such a leader in conservation generally, one of the important things to do, as one looks at whether or not we are getting the best investment for our dollar in conservation, is to focus on the whole cast of conservation tools that we use, if you will. We have land retirement programs like CRP. WRP would qualify. We have authorized out of the 1990 farm bill an easement program which we have not funded. There is the whole technical assistance area and the kind of assistance we provide, how we target that assistance. There are the cost share programs that we provide, be they ACP or the like. There is the education arena which involves extension and other players, and then there is the regulatory arena, which is how we have used swampbuster compliance, sodbuster.

To do a conservation audit in a State like Nebraska, I think it would be appropriate to look at how efficiently all the tools in the toolkit have been used to achieve the conservation goals that Nebraskans believe are important. You, of course, have a leg up with the natural resource districts having that watershed focus and having a focus on some of the conservation priorities.

I just had a chance to travel down to the Ground Water Festival and was down there with Governor Nelson and Carol Browner a few weeks back in your only snowstorm of this year—it was exciting getting down there—and discussed some of these notions.

I just make that comment because all too often I think the conservation debate—and I worry about this in the 1995 farm bill—focuses on CRP, how much and where, but conservation and the conservation accomplishments this country has realized go well beyond what we have done simply with CRP. I would encourage you and your colleagues—and I trust this will be part of our conversation as we get into the 1995 conservation title—will be how well we use the entire tool kit and how much flexibility we have as an agency to work with State agencies to accomplish the conservation goals we jointly agree upon.

Senator KERREY. One of the things I think we can get—and I emphasize I think we can get because I am not certain on this. I am sort of exploring in the dark with it—by engaging the States in the

CRP planning process is really to broaden that base of people who understand the importance of conservation. Taxpayers are saying to me increasingly justify the expenditure. You want \$1 million from me. It takes the 135 families working 3 months to generate \$1 million in tax money. So, I have got to figure out how to answer 135 families times 67 as to what we are getting for it. The more I can engage them in the planning process, make them stakeholders in the planning process, the more likely it is that they will feel excited about the gains that we are making and the progress and the good work that is occurring.

NRCS WETLANDS LEADER

One last thing, and I just raise it not so much as a question because I do not want to abuse the chairman's good nature by dragging this line too long. The administration's decision to make the Soil Conservation Service, now the Natural Resources Conservation Service—I will never get used to that—the lead agency for wetlands is a very good one, but as with many good decisions, it is meaningless unless we now do the tough work of closing the gap between a whole range of standoff issues. We have got to do that.

We have got the right agency in the lead I believe, the one that is the most trusted by the people, which is a very important thing. I do not blame Fish and Wildlife. I do not blame EPA. I do not blame the Corps, but we have the agency that is the most trusted by all parties in charge now in the lead. What you have got to help us do—and I say, Mr. Chairman, I suggested this yesterday to Mr. Johnson that somehow we need an informal roundtable discussion between Senators who are interested or Representatives who are interested, you, and hopefully some people who understand what is going on out there with wetlands that can bring that commonsense evaluation into it. We have just got to go down the list and say, OK, here is an issue where there is a conflict. Let us resolve it. Let us make a decision.

Much on the legislative side, as well as the executive side, once the decision is made, support it. Do not unravel it later. It is kind of an informal reg neg process, if you like, something where we can go forward and resolve these conflicts and get these decisions made because otherwise the whole thing is going to come unraveled. I think what is going to happen is we are going to say, well, this is one thing I guess the Government cannot do, and maybe that is the right conclusion. It may be. But I think we have got an opportunity to show that we can do preservation of wetlands on private property in a fashion that is enormously beneficial.

We are doing a rainwater basin project with Fish and Wildlife, and I have got to tell you at the start of this thing, I was deeply skeptical. To me the Fish and Wildlife has been like the Vietcong. They hit you and you never see. Where the hell are they? They were here yesterday. They have not been a very good neighbor out there.

But they have come on this rainwater basin project, expanded the base, involved lots of other stakeholders. You all have been involved in it. But the locals are getting involved, and all of a sudden, farmers who were hostile to Fish and Wildlife before are beginning to say, you know, over the next 20 years, we could have

something that is a win-win. It does not interfere with our ability to be able to farm. We are still making money farming, depending upon God and the Government, and at the same time we are developing this rainwater basin and we are going to get economic development potential. I have got people in the farming country who could not say ecotourism 2 years ago who are now beginning to see that there is such a thing and that there is economic benefits. And they can see dimly, I will admit at the moment we see it, but we can begin to see a dual track that takes us to a place where we were quite excited about going there.

So, I think there is value in fighting the battles. And make no mistake about it. They are battles. To resolve a checklist in the way that I see it lining up, it is apt to be you are going to have both sides angry. But I think there is tremendous benefit, and I hope we can push forward.

CONSERVATION PARTNERSHIP

Mr. JOHNSON. Well, we certainly recognize the anger that is there, and we have worked very hard at some ideas and we would like to sit down together with many of you to do that.

I think you are right in saying that the Government cannot do it alone and that it has got to be a partnership. On private lands, people have to want to do it too, and I think that we have to work at that. We are seeing a lot of movement. There are an awful lot of farmers out there who understand and care a lot more about wetlands today than they did 10 years ago. There are many who do not. I think we need to work together in partnership, and I think if we do, we could have a good program.

You have got to remember that we have been at this for only 10 years. We used to pay farmers to drain wetlands. I can certainly understand, putting it in that perspective, why we feel the way we do. But I think there are real possibilities and we look forward to working together with you on that.

Mr. LYONS. Your offer for a dialog, Senator, on wetlands and, of course, on some of the other conservation issues is a welcome one. I hope you will be pleased to see that we have spent the last 9 months considering these and many other options in our farm bill proposals. Once we have Secretary Glickman on board, we will be ready to sit down and have that kind of dialog because we are in the same ballpark on these issues.

Senator KERREY. Well, with respect, Mr. Lyons, what I am interested in doing is sitting down and having a session that leads to decisions.

Mr. LYONS. We are all for that.

Senator KERREY. I like dialog, but I think we are at a point right now where it is time to make decisions. And we have to support those decisions. That is why to get a public environment where the representatives are sitting down and we are saying, OK, what are the issues, where are the conflicts, let us identify those conflicts or those disagreements and close it and get on with it.

Mr. LYONS. It would be fairly easy for us to come up with a list of the issues. So, I agree. Let us sit down and figure them out.

CONSERVATION RESERVE PROGRAM TECHNICAL ASSISTANCE

Senator COCHRAN. In the administration of the Conservation Reserve Program, you provide technical assistance with funds that are transferred to your agency from the Consolidated Farm Service Agency [CFSA]. I have to get all this down. Senator Bumpers the other day said he was going to keep calling it the Farmers Home Administration. He did not care what they said. [Laughter.]

Mr. JOHNSON. We do not mind SCS either.

Senator COCHRAN. Anyway, how does that work? You are providing technical assistance to the administrators of the program with funds that are transferred. Is that working OK? Do we need a line item appropriation directly to you for technical assistance? Would that make better sense?

Mr. JOHNSON. We are reimbursed right now for it, and of course, there has not been a whole lot of work on it since we have not had signups for quite a few years right now. So, I think it has worked up to this point.

Senator COCHRAN. So, they do not need much technical assistance. Is that what you are saying?

Mr. JOHNSON. Oh, we need an awful lot, especially if we continue with what Mr. Kerrey is talking about and trying to target CRP much more than it has in the past.

ABSENTEE LANDOWNERS

Senator COCHRAN. There has been a spate of stories about the fact that people who receive CRP payments do not live on the property that is enrolled in the program. Does that make any sense? What difference does that make? Is that a legitimate criticism? That is what I am asking.

Mr. JOHNSON. Well, I think that the Conservation Reserve Program was essentially a contract between the American public and private landowners across the country to retire land for a number of reasons, for environmental benefits. At that time, you have to go back to the mid-1980's when it began and we were in the middle of a farm crisis. Land prices were spiraling downhill very fast. Over the last 10 years, we have learned a great deal about how we can utilize that kind of a program for many more environmental benefits than what we had before.

So, the question really becomes whether or not society should be part of this effort to deal with conservation on private lands. I believe they should personally.

Senator COCHRAN. I am sorry. It does not make any difference to you whether somebody lives in Boca Raton who owns the land in Oklahoma or whether they live in another town in Oklahoma? Or should they live on the plot itself that is eligible?

Mr. JOHNSON. Yes; you are putting me in a box here. [Laughter.]

Senator COCHRAN. Well, it is not a box at all. What difference does it make? We are talking about the land, are we not?

Mr. JOHNSON. It is a very legitimate question, and from my perspective I think that we really need to take a good look at conservation on private lands in this country, not whether somebody is living on a piece of land or not. You cannot have conservation

in this country without having it on private lands. We discovered that 60 years ago this year, in fact, when we began.

Senator COCHRAN. So, it does not make any difference where the owner lives. That is what you are saying. We are talking about the land, not the residence of the owner.

Mr. JOHNSON. That is my personal opinion.

Senator COCHRAN. It is beside the point then, is it not?

Mr. JOHNSON. That is my personal opinion.

Senator COCHRAN. That is mine too. I just was curious as to whether a conservationist, true-blooded, respected worldwide could agree with that. [Laughter.]

Mr. LYONS. I enjoyed watching him squirm.

Senator COCHRAN. And could disagree with the Washington Post funny story, you know, a goofy story.

Mr. JOHNSON. No; I really do believe that as a nation we need to look at conservation on private lands and look at it that way. There are many other ways that we are talking about.

Mr. LYONS. There is another point to that issue, though, Mr. Chairman, and that is beauty is in the eye of the beholder. Are these programs to supplement farmer income, or are they programs to control commodity stocks? Are they programs to achieve conservation? Well, they are all of these, but we look at the value from a conservation standpoint, and I think the point Paul makes is an important one. The conservation benefit resides with the land and that it really does not matter where the landowner resides.

RESOURCE CONSERVATION AND DEVELOPMENT

Senator COCHRAN. The Resource Conservation and Development Program is budgeted in your request for a decrease of \$3.9 million. The program works because local entities provide so much of the money. Thirteen to one is the ratio I am told right now in local money compared with \$1 of Federal money. Why then do you decrease the budget request for a program that is so highly leveraged and has been so popular and has worked so well?

Mr. JOHNSON. The budget numbers, as you see there, represent the component of RC&D that goes toward supplying coordinators for these programs. There has been some cost share in the past years, and we have seen some erosion of that in two ways, this year by saying that we should go down to paying primarily for the coordinators. In the past it has been eroded by implementing more RC&D's, so there were more coordinators for the same amount of money.

This is really a balance between where we are as a nation and trying to balance our budgets and trying to supply the very basic needs for the RC&D program out there.

But you are right. It is an exciting program and it is doing a great deal of good. We have requests for an awful lot more RC&D's out there.

Senator COCHRAN. I am going to ask you to supply for the record a list of all new RC&D areas approved in fiscal year 1995 and an estimate of whether the decreased funding will cause the closure of any existing councils. These RC&D councils, as you know, are the local entities. Will the funds requested allow for any new RC&D councils? You can give me all that for the record.

Mr. JOHNSON. Yes; we will supply that for you.
[The information follows:]

RESOURCE CONSERVATION AND DEVELOPMENT

Fiscal year 1995 approved areas: Alaska, Kenai Peninsula and Southeast areas. The requested decrease in funding for fiscal year 1996 will not require the closure of any existing councils nor will it allow for any new RC&D councils.

Senator COCHRAN. I have some other questions to submit and hope that you will provide responses for our record.

EMERGENCY SUPPLEMENTAL FUNDS

I am curious about one thing that I would like to ask at this point, though, and that is the estimate that we received last year that as of April 28, 1994, \$194,373,500 of the \$340,500,000 contained in the 1994 emergency supplemental was available to be carried forward into fiscal year 1995. This is in the "Watershed and flood prevention operations" account. In the supplemental, the committee encouraged the agency to use any remaining funds from this program to continue the normal program.

My question is, What is the current balance of these funds, and has the agency requested the release of these funds for obligation? Does anybody know the answer to that?

Mr. JOHNSON. Yes; Mr. Dewhurst might be able to give you some specifics beyond what I can. But of the \$340 million, \$133 million was used in 1994, \$23 million was transferred to the Consolidated Farm Services Agency, and \$25 million has been used thus far in 1995. I believe that those are the figures that we have right now. What is being held by OMB right now is a little over \$100 million, \$100,500,000.

Senator COCHRAN. Thank you very much for that information.

MISSISSIPPI DELTA STUDY

My last question has to do with the delta study. The then-Soil Conservation Service initiated a study several years ago to determine the economic and environmental feasibility of using alternative water supplies for agricultural irrigation in the Yazoo Basin in Mississippi.

Does the budget request include funds to continue this study by the Natural Resources Conservation Service? I also would like to know what the status of the progress—give us a status report, if you can—that has been made on this important study and some kind of timetable or estimate for when the study will be complete.

Mr. JOHNSON. I am told that we are continuing to fund it. In terms of the status, unless somebody here at the table is ready to step to the mike on that, we will have to provide it for you.

Senator COCHRAN. Do you know how much money is being requested for the continuation of the study?

Mr. JOHNSON. Apparently we do not have that with us. We will get it to you, Senator.

[The information follows:]

MISSISSIPPI DELTA WATER SUPPLY STUDY

Although the exact amount of fiscal year 1996 funds needed for the Mississippi Delta Water Supply Study, including the Yazoo Basin, are not known at this time,

they are included in the 1996 budget proposal. The fiscal year 1995 funding for the Mississippi Delta Water Supply Study is \$4.68 million.

Public involvement, interagency coordination and partnership development begun at project initiation in 1994 are continuing. Background water quality data and water supply route inventories are progressing. Planning for land treatment measures is scheduled for completion in 1996. Environmental analyses are under way and will be completed in 1996. Row crop water use data was collected in 1994 with plans in place for continued data collection in 1995. Preliminary designs for structural measures are progressing with completion scheduled for 1997. Economic and social analyses are scheduled for completion in 1997. The study is scheduled for completion in fiscal year 1998.

SUBMITTED QUESTIONS

Senator COCHRAN. Thank you very much. I really appreciate the cooperation and the attendance at the hearing by all of you this morning. It has been a very helpful hearing and a very informative one. Thank you very much for your continued cooperation. We will submit additional questions to be answered for the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

GREAT PLAINS CONSERVATION PROGRAM

Question: The FY 96 request for the Great Plains Conservation Program reflects a decrease in this program of \$4,343,184 from the FY 95 appropriation. The agency is emphasizing its concentration of staff in the field and its decrease of staff at the national headquarters. Why then, are all staff reductions in this program reflected in the field personnel, and the national headquarters staff remains the same?

Answer: The staffing plan for the Great Plains Conservation Program had not been completed when the budget materials were prepared. However, the total number of staff affordable at the proposed funding level was known, and no changes were made at that time for headquarters in order to continue to provide adequate national guidance for the program. The actual number of headquarters staff needed to operate this program may be different than the number shown in the President's FY 1996 budget. We know that the total number of headquarters staff paid by all funds eventually will be reduced by about 50%.

Question: What effect will these reductions have in the delivery of technical assistance to landowners, or continuing activities in the 10 Great Plains states?

Answer: Technical assistance for the GPCP program has been reduced to reflect the number of new and ongoing contracts estimated for fiscal year 1996. Landowners will continue to receive assistance for all active contracts and about 100 new contracts would be signed in fiscal year 1996 versus 380 in fiscal year 1995.

Question: Please provide the committee with information demonstrating that the decrease in soil erosion in the 10 Great Plains states are attributable to this program rather than the Conservation Reserve Program.

Answer: The GPCP has been helping to prevent soil erosion in the 10 Great Plains states since its inception in 1958, 28 years longer than the CRP has been in business. The average annual soil savings during the past 15 years is 3.1 tons per acre of all acres contracted by the GPCP. An example of the amount of soil erosion prevented by the GPCP (not including the CRP) for the past three years is shown below.

<u>YEAR</u>	<u>ACRES</u>	<u>TONS</u>
1994	3,050,388	9,456,511
1993	2,826,701	8,762,773
1992	4,036,653	12,513,624

SALARIES

Question: You indicate that staffing levels have been reduced throughout the agency by attrition and buyouts during FY 95. Given this, are there funds appropriated for these salaries which are available to be carried over into FY 96.

Answer: All funds appropriated for salaries in fiscal year 1995 will be obligated and no funds for salaries will be carried over into fiscal year 1996. The fiscal year 1995 appropriation would not have been sufficient to pay all the employees who were on the rolls at the start of the fiscal year, if we had not offered the buyout to them.

COLORADO RIVER BASIN SALINITY CONTROL PROGRAM

Question: The FY 96 budget request for the Colorado River Basin Salinity Control Program reflects a decrease of \$1,819,000 from the FY 95 appropriation. What effect will this have on the program?

Answer: Total funding to support technical assistance and cost share for the Colorado River Basin Salinity Control Program does not actually decrease. In fiscal year 1995, both technical assistance and cost share funds were appropriated to this appropriation account. In fiscal year 1996, only the cost share funds are proposed to be appropriated in this account and the technical assistance funds will be appropriated in the Conservation Operations appropriation account.

Question: The FY 96 budget justification reflects that none of the funds appropriated in FY 95 have been distributed. Please explain.

Answer: Since then, NRCS has distributed all FY 1995 funds for financial assistance for contracts, technical assistance, and information and education activities.

The reason for the delay in distribution of FY 1995 funds is due to the Department of Agriculture's Reorganization Act which was approved in October 1994. The Act transfers total administrative responsibility for the program to NRCS. NRCS has been actively working on all aspects of the program transfer since late October 1994. The transfer requires new regulations and a new program handbook to be written, training of NRCS personnel and the development of data collection procedures, and implementation of accounting systems.

Question: Please provide the committee with an outline of the projected activities for this program in the future, including any anticipated completion dates.

Answer: Currently there are five active projects; three in Colorado, and one each in Utah and Wyoming. The Price-San Rafael project in Utah has a completed Environmental Impact Statement (EIS) and is the next project slated to be started.

Potential projects are awaiting further study in New Mexico and Wyoming. One of these potential projects, the San Juan Navajo Nation unit in New Mexico is awaiting an irrigation study to determine the amount of salt load reduction that can be achieved in the San Juan River.

The first unit that is anticipated to be completed is the Big Sandy River unit in Wyoming in year 2003. The remaining projects are slated for completion beginning in year 2009.

WATERSHED AND FLOOD PREVENTION OPERATIONS

Question: The Administration proposed to terminate the Watershed and Flood Prevention program in FY 95, and requested \$25 million in termination expenses, a decrease of over \$200 million from historic levels for this program. Congress appropriated \$70 million for this program in FY 95. The Administration's FY 96 request is \$100 million. Has the Administration changed its priority of this program to request this increase?

In testimony before this subcommittee last year, it was indicated that the Administration had hoped that state and local governments would make up for the decrease in funding, has this occurred? Please provide for the record a list of these projects, the amount of funds obligated to date, and the funds needed to complete them, indicating how much was needed to complete them at the end of FY 94.

Answer: The President's budget did not propose to terminate the Watershed and Flood Prevention Program in fiscal year 1996 as was proposed in the fiscal year 1995 budget. Instead, the program is being refocused to make it environmentally beneficial, with high returns to society. We are conducting a thorough review of the present program and outstanding commitments to sponsors to confirm that all remaining work is environmentally and economically sound. As a result of this analysis, project sponsors and NRCS have agreed to remove 2,266 miles of channel and 607 structures from our construction backlog.

We propose to add waterways restoration, wetland rehabilitation, rural water supply, allow sponsors to cost share for flood prevention works of improvement, and to establish a loan program to install flood prevention projects. Benefit analysis will include environmental, economic, and social benefits. We suggest that the

requirement for 20 percent agricultural benefits be removed. We will focus on rural development, and low income and Native American communities. We will accelerate our initiatives for protecting and enhancing habitat for threatened and endangered species.

We do not have a project by project listing of state and local contributions to the watershed and flood prevention programs. However, our records indicate that state and local contributions for these programs were \$65 million in FY 93, \$83 million in FY 94, and projected to be \$87 million in FY 95.

PLANT MATERIALS CENTERS

Question: The budget includes a request for \$8.875 million for the Plant Materials Centers. Do any Agricultural Research Service locations currently duplicate the research being conducted at these locations? Can savings be achieved by transferring these centers to the Agricultural Research Service, thereby eliminating any duplicative management structure, or research overhead? If so, how much could be saved?

Answer: The work performed at PMC's is complementary to ARS research, not a duplication of the ARS effort. The purpose of PMC's is to produce plant material to address the needs of soil and water conservation problems on all public and private lands. This includes development of plant materials and technological information to establish, maintain, and manage a quality environment. ARS is a basic research agency predominantly working on agronomic aspects. NRCS, in contrast, produces information which is primarily application oriented and deals almost exclusively with non-cultivated plants, most of which are native species. We cooperate closely with ARS and other agencies, such as the National Park Service, Forest Service, Army Corps of Engineers, and state agencies.

Since there is no duplication of effort there would be no savings associated with transferring these centers to another agency. In addition, a transfer would severely impact NRCS' ability to deal effectively with conservation problems. The plant materials program is the only vehicle available to, and under control of, NRCS to meet its plant materials needs. There are no comparable programs in either the public or private sector. Had these centers not developed and introduced conservation plants into the commercial market, fulfilling the CRP mandate to establish permanent cover on highly erodible land would have been nearly impossible. No single tool offers more versatility or is more cost effective for long term environmental protection and improvement than plants. No agency is

more logical to deliver the needed plant materials technology than NRCS.

A consolidation of centers to reduce overhead would also negatively effect NRCS' effectiveness. The centers are located in different regions to serve the specific topographic, soil, climatic, and ecological characteristics of that area.

WETLANDS RESERVE PROGRAM

Question. According to the Competitive Enterprise Institute, conversions of agricultural wetlands have decreased by over 90% in the past 30 years. Given this information, do we still need a Wetlands Reserve Program?

Answer. Yes, absolutely. Although the rate of loss of wetlands has decreased over the last thirty years, with the average loss of wetlands between 1982 and 1992 ranging from 70,000 to 90,000 acres per year, over 100 million acres of wetlands have been converted in this country since colonial times. The loss of wetlands has directly contributed to the significant decline of waterfowl populations and the decrease in water quality in many streams in agricultural areas. A number of species that are listed as threatened or endangered are closely associated with wetlands and the historic loss of wetlands has played a major role in their population declines. While many of the wetlands that were converted now serve as productive agricultural lands, there are many converted wetlands, that due to their high susceptibility to flooding and other disaster problems and potential environmental values could be restored, making a positive contribution to resolving a host of environmental problems. Through previous non-governmental scientific reviews of wetlands restoration, it has been suggested that a goal of 10,000,000 acres should be restored to wetlands. This recommendation was also contained in the August 1992 Report of the Interagency Committee on Wetlands Restoration and Creation, i.e., "A National Program for Wetlands Restoration and Creation."

Question. It is my understanding that the funds made available in FY95 for approximately 118,823 acres in new Wetlands Reserve Program (WRP) enrollments has not been obligated and that sign-ups will not begin until May. Why does NRCS take so long to obligate these funds?

Answer. Under the re-organization of USDA, the responsibility for administering the WRP moved to the NRCS from the Consolidated Farm Services Agency (CFSA). Following re-organization, NRCS held a number of focus group sessions around the country to determine what changes should be pursued in a number of program areas, including WRP. In response to that effort, a new WRP

Rule is in the process of being completed. The new WRP Rule will form the basis for NRCS implementation of WRP, and will provide for many of the needed changes in the program. The first NRCS sign-up will begin in late May 1995. The May sign-up will provide for program implementation in all States, where previously the program was limited to 20 states, and will include increased reliance on State level decisions and local level input. A national WRP training program will take place in early April 1995. In the interim, NRCS has allocated approximately \$43,190,000 of the 1992 and 1995 program funding to those States that currently have a backlog of landowner offers to initiate additional easement acquisitions, approximately \$3,500,000 for the Technical Assistance effort and to cover costs associated with the national training effort. With the \$43,190,000, States have initiated action to acquire 70,000 acres for WRP enrollment. Following the May 1995 sign-up, an additional 50,000 to 70,000 acres of easement purchases will be initiated.

The delay in obligating WRP funding is partly due to the re-organization currently under way, development of the WRP new rule, and the national training program needs for NRCS. Delays in program obligations reflected at the State level are mostly related to the acquisition process (i.e., obtaining appraisals, clearing title, surveys, and recording of the easement document). In the past, the full responsibility for performing most of these tasks were left to the individual landowner and his/her private attorney. This was an unfair burden that complicated and slowed down the obligation of WRP funds. In the future, NRCS proposes to streamline the easement acquisition process and elevate most of the individual actions conducted by the landowner during the easement filing process. This effort should greatly expedite the process.

Question. It is my understanding that there currently are about \$47 million in funds in this program which for one reason or another have not been obligated for the acreage they were originally intended, and that the NRCS is planning to reallocate those funds again. Can you please explain to the Subcommittee how this happened?

Answer. Once a landowner offers to sell an easement and the Department accepts that offer, NRCS considers the funds to be obligated. NRCS adopts the position that our initial written commitment to the landowner is the basis for establishing an obligation of program funds. Based on this approach, the FY 1992 and 1994 WRP funds are considered obligated. In terms of the FY 1995 funding, NRCS has allocated some funding to those states that have a backlog of easement offers and are holding approximately \$55,000,000 for the May 1995 sign-up.

Question. What methodology will be used to allocate these funds?

Answer. The allocation of WRP funding is based on a review of the amount of acreage of cost effective and ecologically sound opportunities offered by landowner in each State during a sign-up period, the effort to contain the average cost of easement acres to an amount in the \$700 range to the extent possible, and the goal of providing some level of WRP funding to all types of wetland restoration needs, e.g., bottomland hardwoods of the Southeast, Prairie Potholes of the Midwest, Playa Lakes of the High Plains, Central Valley of California Marshes, etc. The recent allocation of \$43,190,000 to fund the backlog of landowner easement offers that occurred as a result of the FY94 sign-up should serve as an example of the allocation process.

WATERSHED AND FLOOD PREVENTION OPERATIONS

QUESTION: It is my understanding that an estimate was provided to this subcommittee last year that as of April 28, 1994, \$194,373,500 of the \$340,500,000 provided in the 1994 emergency supplemental was available to be carried forward in FY 95. In the supplemental bill, the committee encouraged the agency to use any remaining funds from this program to continue the normal program. What is the current balance of these funds?

ANSWER: As of March 15, 1995, the current balance of these funds available to NRCS was \$15,391,759. In addition, \$100,500,000 remains in reserve by OMB.

Question: Has the agency requested release of these funds for obligation? Please provide an itemization of the use of the \$340.5 million. Also, please provide documentation of the request to release additional amounts, and the subsequent responses from the Office of Management and Budget.

Answer: OMB was originally holding \$125 million in reserve. We requested the release of \$25 million of these funds for Emergency Watershed Protection operations. OMB released those funds to us.

A table itemizing the use of the \$340.5 million is being provided:

Appropriated.....	\$340,500,000
OMB Holding 3/15/95.....	100,500,000
Available to NRCS.....	240,000,000
Obligated in FY 94.....	55,402,841
Transfer to CFSA (formerly ASCS)....	23,000,000
Allocated for EWP in FY 95 (3/15/95)	146,205,400
NRCS reserve.....	15,391,759

WETLAND DELINEATIONS

Question: There has been a great deal of interest among members of Congress to reform the current laws governing wetlands in this country. In the Fiscal Year 1995 Agricultural Appropriations bill, \$15.6 million was provided to implement a new Administration policy with respect to wetland delineations on agricultural lands. You indicate that \$8 million of these funds have been used to certify 65% of the wetland acreage. However, you also indicated that \$15.6 million will be needed in FY 96 to complete certifications on the remaining 35%. Why the disparity?

Answer: In FY 1994, NRCS made wetland determinations on a request only basis. We spent approximately \$8 million making about 200,000 wetland determinations. We have certified very few wetland determinations. The \$15.6 million requested in the FY 1995 budget was to implement the MOA. Since it was not signed until January of 1994 and training was not provided to the field personnel of the four agencies until May, the full workload associated with implementation of the MOA is not reflected in these numbers. Therefore, we anticipate the cost to implement the MOA in 1996 to be \$15.6 million as requested.

Question: Does the Department favor the status quo in the regulation of wetlands on agricultural lands?

Answer: Although Swampbuster has been very effective in reducing the loss of wetlands to agricultural production, it has a number of significant problems that need to be addressed. We believe that opportunities exist for change which will protect the important functions and values of wetlands while providing for a fairer, more reasonable program. Our goal is to create a program that farmers can be proud of. We believe that with expanded mitigation opportunities, and addressing wetlands on a whole farm or watershed approach, most of the concerns of farmers can be resolved in a positive manner.

Question: There is some interest in the Senate to stop the current process of wetland delineation on agricultural lands until an overhaul of these laws occurs. What is your reaction to this?

Answer: The Secretary announced on April 6, that delineations and certifications will be done only on request until completion of the 1995 Farm Bill. The only other exception to this rule is where NRCS must determine whether a person has converted a wetland making production possible which is a violation of the Act.

Question: Does the Department have any recommendations in modifying the Swampbuster provisions of the 1985 Farm Bill?

Answer: Yes, the Department is currently developing several recommendations which would provide additional flexibility in implementing the Swampbuster provisions of the Food Security Act of 1985. These recommendations will be forth coming.

DELTA STUDY

Question: The Natural Resources Conservation Service (then the Soil Conservation Service), has initiated a study in recent years to determine the economic and environmental feasibility of using alternative water supplies for agricultural irrigation in the Yazoo Basin in Mississippi. Does the FY 96 budget include funds to continue this study?

Answer: Funds to continue the Mississippi Delta Water Supply Study, including the Yazoo Basin, are included in the 1996 budget proposal.

Question: Please provide a status report on the progress which has been made on this important study, and a timetable for the completion of this study.

Answer: Public involvement, interagency coordination, and partnership development begun at project initiation in 1994 are continuing. Background water quality data and water supply route inventories are progressing. Planning for land treatment measures is scheduled for completion in 1996. Environmental analyses are under way and will be completed in 1996. Row crop water use data was collected in 1994 with plans in place for continued data collection in 1995. Preliminary designs for structural measures are progressing with completion scheduled for 1997. Economic and social analyses are scheduled for completion in 1997. The study is scheduled for completion in FY 1998.

RESOURCE CONSERVATION AND DEVELOPMENT

Question: The budget request reflects a \$3.9 million decrease in the Resource Conservation and Development Program. The budget also indicates that local entities provide about \$13 for every \$1 in federal money.

The National Association of Resource Conservation and Development Councils has indicated that it has 45 applications awaiting funding and anticipate additional applications through FY 96. How can the number of Councils expand when the Administration requests fewer dollars for the program?

Answer: The funding for each Resource Conservation and Development, RC&D, area was about \$100,000 for fiscal year 1995. We do not anticipate authorizing any additional new areas for the remainder of this year. Usually, RC&D Councils support the balance and some efficiencies can also be gained through co-location. The

intent is to move RC&D councils to self-sufficiency with federal funds playing a lesser role.

Question: Please provide for the record a list of all new areas approved in FY 95.

Answer: There have been two areas approved in fiscal year 1995, the Kenai Peninsula and Southeast Areas in Alaska.

Question: Will the decreased funding requested in FY 96 cause a collapse or closure of any existing councils?

Answer: We do not anticipate a collapse or closure of any existing councils due to reduced funding. Their efficiency may be slightly decreased if these councils do not find alternative funding.

Question: Will the funds requested for FY 96 allow for any new RC&D councils?

Answer. No, we do not anticipate authorizing any new councils in fiscal year 1996.

VEHICLE PURCHASES

Question: The budget request includes funding for the replacement of 400 passenger motor vehicles, and 20 additional vehicles to be added to the fleet. What is the need for these additional vehicles, especially at a time when total staff is being reduced?

Answer: A cost analysis was recently conducted to determine if it is more cost effective to buy passenger motor vehicles or to lease them, either commercially or through GSA. The results of this cost analysis show that in 99 percent of the cases, it is more cost effective to buy than lease. Although this request will add 20 vehicles to our owned fleet, the number of vehicles available to our staff will not be increased because we will terminate the 20 GSA leased vehicles.

SALARIES AND EXPENSES

Question: In the budget request, the breakdown by object classification indicates that expenses for benefits for former personnel decrease from \$14.3 million in FY 95 to \$3.4 million in FY 96. How does this occur when there are increases in the number of former personnel?

Answer: The higher level of obligations for former personnel in fiscal year 1995 is related to one time costs associated with the buyouts that will not occur in fiscal year 1996.

Question: Please itemize the increases in costs under "other services" included in the breakdown by object classification.

Answer: We will provide that breakdown for the record.

[The information follows:]

NATURAL RESOURCES CONSERVATION SERVICE
SUBJECT CLASS BREAKOUT
OBJECT CLASS 25.2 (OTHER SERVICES)
FISCAL YEARS 1994, 1995 & 1996
(in thousands of dollars)

OBJECT CLASS	TITLE	1994	1995	1996
2500	Other Services	7,192	7,366	7,419
2501	Federal Rent - Non GSA	212	206	207
2502	Non GSA Federal Rent	14,473	15,183	15,291
2508	** Unassigned Title **	(1)	(1)	(1)
2509	** Unassigned Title **	2	2	2
2510	Contract Services - Other Fed	520	534	538
2511	Janitorial Services	140	147	148
2512	NFC Services	3,686	3,860	3,888
2513	Executive correspondence	135	114	115
2514	Federal Prot Service	302	298	300
2517	Design Center Service	73	79	80
2518	Video & Film Center Services	384	402	405
2519	Data Banks	21	23	23
2520	Personnel Related Expenses	87	94	95
2521	Temp Storage of Household Goods	444	461	464
2522	Non-temp Storage of HH Goods	14	14	14
2523	Training, Tuition Fees, Etc.	2,468	2,602	2,621
2524	Security Invest Charges	55	59	59
2525	Reimbursable Details	266	230	232
2528	Health Units	129	137	138
2530	Rep, Alt, MTNC of EQ/S	608	634	639
2531	Vehicle Maintenance	2,848	2,937	2,958
2532	Other Equipment Maintenance	314	326	328
2533	Maintenance - Space (Interior)	507	521	525
2534	Maintenance - Space (Exterior)	20	21	21
2535	Maintenance - Office Equipment	748	789	795
2536	Remedial Assistance	71	77	78
2537	ADP Equipment maintenance	826	870	876
2538	Maintenance - Telephone	82	95	96
2539	Rep - Office Furniture	34	35	35
2540	Contract Services - Other	3,285	3,475	3,500
2541	Flying Contracts	615	632	637
2542	Research	105	107	108
2544	A & E Contract	1,770	1,542	1,553
2545	Art Work	59	62	62
2546	Market Promotion	0	0	0
2548	On-line Data Retr Services	10	11	11
2550	Agreements	8,479	13,459	13,815
2551	Coop State Agencies	3,818	4,019	4,048
2554	Research	158	158	159
2556	Service/ Advertising	28	30	30
2559	Agreements - Other	12,952	18,317	18,708
2560	ADP DP Service Supplies	48	51	51
2561	Data Entry	18	17	17
2563	KCCC/WCC	1,475	1,526	1,537

2566	Fort Collins Computer Center	142	154	155
2568	Maintenance of Software	313	327	329
2569	ADP Service Contract	1	1	1
2570	Miscellaneous Services	3,113	3,162	3,185
2571	Data Acquisition Surv & Exp	4,448	4,460	4,492
2572	USDA Bulk Shipments - GPO	4	4	4
2573	Ev of EXAH, PSDM, AMPS	0	0	0
2574	GSA Motor Pool Services	28	29	29
2575	Non-travel Expenses - other	770	804	810
2576	Medical and Dental Charges	55	58	58
2580	Salary & Check Postage Fees	203	199	200
2581	Bank Service & Monthly Fees	4	4	4
2583	** Unassigned Title **	0	0	0
2584	Administrative Fee - Credit Cards	(2)	(2)	(2)
2585	** Unassigned Title **	2	2	2
2586	Exhibit Fees	7	8	8
2587	Consultant Fees	100	102	103
2590	Distributed Overhead	6	7	7
2593	Vehicle Storage	10	11	11
2594	Vehicle Accident Report	91	98	99
2599	PY/CY ADJ -SPARS ON	(218)	(206)	(208)
	TOTAL	78,557	90,743	91,912

REORGANIZATION

Question: In the NRCS Reorganization/Reinvention Executive Summary, the administrative functions of the NRCS and the U.S. Forest Service are to be consolidated on a mission area basis. Have these functions been combined?

Answer: None of the administrative functions have been combined at this point. Since the December 7, 1994 release of our framework reorganization plan, a joint NRCS/Forest Service team worked to develop a detailed plan for administrative cooperation between the two agencies. The report from the team was finalized and submitted for Departmental approval on March 1, 1995. The team recommended the incorporation of a variety of management approaches including centers of excellence, lead agency, and separate management of specific functions. The team recommendations are in addition to the internal streamlining, business process reengineering and automation that each agency has underway. The team concluded that the internal streamlining of each agency would yield the most significant savings - 37% administrative staff reduction in NRCS and a 15% reduction in the Forest Service. Barriers such as program requirements, geographic location differences, and the major investment that would be necessary to change systems (financial, accounting, etc.) limit opportunities to consolidate activities and produce savings. NRCS and FS will move ahead to consolidate and cross service in areas that make sense such as civil rights, employee benefits, claims, IRM security, and a few others but additional savings beyond the internal streamlining will be limited. NRCS will also pursue opportunities with other agencies when they are

collocated, such as Consolidated Farm Services Agency, to share administrative services and reduce costs.

Question: Where are the savings from this consolidation reflected in the budget? Are there equal savings to both the NRCS and the Forest Service?

Answer: The NRCS-FS team report projects minimal savings through the consolidation initiative. After initial investments to implement, annual savings of 11 FTE and \$600,000 are anticipated. An agency breakdown is not available at this time. While these savings are small, they will be in addition to the major savings projected for each Agency resulting from internal streamlining.

QUESTIONS SUBMITTED BY SENATOR McCONNELL

WETLANDS

Question: Does the Department favor the status quo in the regulation of wetlands on agricultural lands?

Answer: No. Although Swampbuster has been an effective program for reducing the rate of conversion of wetlands for agricultural purposes, there are significant problems that must be corrected. We favor a much more flexible approach whereby we protect the functions and values of wetlands while working with the private landowners in addressing all of their resource problems.

Question: Does the Department have any recommendations in modifying the Swampbuster provisions of the 1985 Farm Bill?

Answer: Yes, the Department is currently developing several recommendations which would provide additional flexibility in implementing the Swampbuster provisions of the Food Security Act of 1985. These recommendations will be forth coming.

Question: Assuming that changes will occur in federal wetlands policy, would it be prudent to halt the current recertification of new wetland delineations until passage of the 1995 Farm Bill?

Answer: The Secretary announced on April 6 that delineations and certifications will be done only on request until completion of the 1995 Farm Bill. The only exception to this rule is where NRCS must determine whether a person has converted a wetland making production possible which is a violation of the Act.

QUESTIONS SUBMITTED BY SENATOR BURNS

BEAVERHEAD LAWSUIT

Question: How does the Forest Service plan on meeting the commitments it has agreed to in the Beaverhead settlement with its present staff and budget?

Note: The Forest Service has agreed to simultaneously: 1) amend the Beaverhead Forest Plan for riparian standards and guidelines for grazing through a 2-year NEPA/NFMA process; 2) annually monitor the grazing allotments on the Beaverhead; and 3) prepare NEPA documents on each allotment or permit not deemed "current."

The agency stated in 1986 that it would complete NEPA compliance on grazing allotments. It has failed to do so. Also the 1986 Forest Plan stated range improvements would be developed as scheduled. Those have not been developed.

Answer: The Forest Service is placing additional emphasis on the range program in both FY 1995 and FY 1996 to help us meet the commitments made in the settlement agreement. Funds will be reprogrammed in FY 1995 to assist in meeting these commitments. Additional funding has been included in the President's budget to continue the program accomplishments in FY 1996. We will be able to complete an amendment to the Beaverhead Forest Plan to address riparian standards. The Forest Service is currently conducting annual monitoring of grazing allotments but this effort will be intensified in both FY 1995 and 1996. Preparation of NEPA documents will continue to be emphasized.

Question: Why did the Forest Service agree to pay the Wildlife Federation attorney fees in the Beaverhead lawsuit when the case was settled by the Agency and no one prevailed on any of the merits of the case?

Answer: The Equal Access to Justice Act provides payment of fees to plaintiffs who bring lawsuits against the government even in cases that settle where the government adjusts its position.

Question: Why would the Forest Service agree to issue less than 10 year grazing permits pending NEPA completion on the Beaverhead National Forest?

Answer: The Forest Service has the authority to issue permits for less than 10 years when it is in the interest of sound land management. In this case, it was in the interest of sound land management to issue permits with a term that coincided with the scheduled date for NEPA analysis to provide for a comprehensive review of resource concerns and to maintain continuity in grazing while this NEPA analysis was being completed.

Question: Why would the Agency agree to NOT issue or renew permits if the agency failed to comply with its own NEPA schedule?

Answer: The settlement agreement provided a realistic schedule to complete this NEPA analysis and documentation over a 10-year period.

Question: Why did the agency agree to punish the grazing permittees on the Beaverhead should the AGENCY not complete its agreed to NEPA schedule?

Answer: It is not the intent of the Forest Service to punish the permittees. The agency feels that legally we must comply with NEPA if we are to continue authorizing grazing. Providing a 10-year schedule with which to comply would provide for continuity in grazing while environmental reviews were being completed.

Question: How much money has been spent on the Beaverhead National Forest by the agency in monitoring range and riparian conditions?

Note: To date most of the monitoring on the Beaverhead has been fragmented and inconsistent. Our experts tell us that the data gathered to date is inconclusive at best on what the range and riparian condition is on the Forest.

Answer: Since 1987, the Beaverhead National Forest has spent between \$135,000 and \$290,000 annually on range monitoring. The average cost per year was \$215,000. Compliance monitoring on the allotments is the major expense. It is difficult to be more specific because monitoring has been funded as a part of an overall program, rather than being tracked as a separate work activity. The incorporation of the ecosystem planning, inventory, and monitoring budget line item will improve our ability to isolate monitoring costs in the future, because monitoring is a specific activity in this funding concept.

Question: Why won't the Forest Service take responsibility in the Beaverhead Lawsuit and subject itself to future judicial ramifications rather than the permittees, should the agency fail to complete the agreed to NEPA analysis in the Beaverhead settlement?

Note: The permittees have said many times they don't disagree with a NEPA compliance schedule. The permittees do disagree with the results if the agency fails to perform.

Answer: The Forest Service could certainly be subject to judicial ramifications if the terms of the settlement were not met. It is not the intent of the Forest Service to punish the permittees. The reality is that if compliance with NEPA does not occur at some

future point, the agency will not be able to legally authorize livestock grazing.

Question: What is your prediction of the outcome if the National Wildlife Federation lawsuit is argued to a conclusion? What do your lawyers advise you to do?

Answer: It is our assessment that we would not prevail on the question of NEPA compliance and the only question for the court would be to decide what relief should be granted the plaintiffs. The Forest Service felt it was in the public's best interest to settle the case and focus on how we were going to comply with NEPA.

Question: Would we be better off from an ecological standpoint if we spent the money you requested for ontheground projects rather than NEPA paperwork?

Answer: NEPA documentation is not only required by law, it ensures that adequate consideration is given to project impacts on other resources. The Forest Service complies with other environmental laws through the NEPA process. A balanced mix between planning and implementation is the most desirable.

Question: What changes to existing laws would you recommend to address this crisis? And, if we were to proceed in the fashion you recommend, how will the Administration respond?

Answer: We would propose no changes to existing laws. The 1996 President's budget shows an increased commitment to the range management program. This trend must continue if adequate budgets and staff to meet current legal mandates are to become a reality.

Question: In the future, would you be willing to consult with us ahead of time if you are about to make policy through a settlement agreement and recommend that we spend millions of taxpayer dollars?

Answer: We do not believe we have made policy through the proposed settlement of the Beaverhead lawsuit. We have simply used an alternate approach in complying with current laws.

DOWNSIZING

Question: Why is the Forest Service downsizing its field offices and not the Washington office? Why is the Region 1 office in Missoula being closed and why is Montana the only area in the country where two national forests are being proposed for merger?

Answer: We are planning to downsize our overhead operations. This includes Regional Offices, Station Headquarters, Area Office, and the Washington Office.

Our plan to downsize the Washington Offices by at least 25 percent will be ready by about the end of March 1995. We propose to merge the Regional Office activities in Missoula with those in Denver, because we must achieve efficiencies in our headquarters operations. This is necessitated by budget cuts and personnel cuts. The Regions are doing this to increase their efficiency and to be more effective in delivering services to the field and the public.

Question: Can you give us an assessment of the cost associated with the move of the Regional Office from Missoula to Denver? Why was it that the Forest Service did not use this cost as a measure of the changes required under the reorganization?

Answer: We are currently completing a cost analysis of the proposed regional changes. Almost all the likely cost savings are expected to result from reductions in number of personnel. Combining regional offices would enable efficiencies in staffing that would result in the greatest potential cost savings over the shortest time.

ACCESS

Question: Why is the Forest Service making it so difficult for people to access backcountry? Do you have statistical information to backup your claim that "road density" affects grizzly bear habits? A claim that Rangers use to close roads in our state.

Answer: We have checked with our field units and are not aware of any permanent access restrictions into the backcountry. On occasion, we have had to temporarily restrict trail use when bears have been found to be feeding on a carcass of either a big game or domestic animal. These temporary restrictions have been to minimize the possibility of a human injury and the potential loss of a bear.

Motorized access, most often measured in road density, is one of the most influential parameters affecting grizzly bear and other wildlife use of habitats in the Northern Rockies. Numerous studies have been conducted since the early eighties that have indicated statistically that bear use of habitat is less than expected near open roads. Mortality of individual bears has also been tied to open roads. The Interagency Grizzly Bear Committee has requested that this biological information along with social and other land management considerations be incorporated into the development of access management levels for each of the grizzly bear recovery zones. This work is currently ongoing in each recovery zone.

GREATER YELLOWSTONE COORDINATING COMMITTEE

Question: What is the Greater Yellowstone Coordinating Committee doing? Should we expect a "Vision Doc II?"

Answer: The Greater Yellowstone Coordinating Committee is developing an initiative to give land management agencies a mechanism for the collection of information across administrative boundaries; a basis for ecosystem planning and assessments as deemed appropriate; and the ability to more effectively coordinate management among units.

Two working groups are planned: An information management working group to analyze alternative choices and best processes for supporting the information management goals; and a science working group to develop a framework for assessment and assure appropriate and continuing scientific involvement.

The initiative will be implemented as resources permit. No Vision Doc II is planned.

CONCERNS ABOUT FOREST MANAGEMENT

Question: Would you address the concern expressed by so many Montanan's--they spend time and energy participating in the comment process, attending meetings, submitting written testimony, using the only tool available to them to effect change in proposed regulations and find time and again that the agency listens politely and then does exactly what it wants?

Answer: Improving the dialogue between the agency and the public and promoting the idea of working with the public as partners are two key goals to which the Chief has committed his energies and which he stresses in all his meetings with employees throughout the agency. It very much concerns the Chief and other agency employees to hear that citizens feel their views are not being considered or that the time and effort they commit to public participation is not recognized or appreciated.

The Forest Service genuinely value public participation in agency decision making at all levels of the organization, whether the decisions are on proposed site-specific projects, draft amendments to forest plans, or proposed agency policies or regulations. Forest Service officers always find that citizen comment and input help them make more informed decisions. We believe that, in general, the agency has a good track record of responding to citizen comments in adopting final decisions on rules.

However, for some citizens the only credible proof that an agency has listened and considered their comments is that the agency adopts the citizens' point of view.

The agency cannot always do that. First, the agency hears conflicting points of view from citizens; citizens do not have a monolithic or singular point of view on Forest Service proposed rules, anymore than they have a singular point of view on local sitespecific projects. Moreover, statutes, regulations, and case law often constrain the choices available to a deciding official. The Multiple-Use Sustained Yield Act, for example, requires the agency to balance the uses, outputs, and benefits from National Forest System lands. When lands must be used for many purposes, compromises must often be made. We in the agency will continue to do all we can to help our interested and affected citizens understand both the discretion and lack of discretion that is available to us in making resource decisions and to improve our effectiveness in explaining the rationale for our decisions.

Question: There seems to be a certain arrogance in the attitude of the Forest Service that the people of Montana who wish to enjoy our forests are not part of the equation--that the protection of flora and fauna takes precedence over people--the same people that through their taxes pay for the Forest Service budget and all of these programs. How do you address that concern?

Answer: The people of Montana, and all other citizens of the United States, are a critical part of the equation that the Forest Service considers in the management of our nation's forests and grasslands. In our management, we seek to meet the current and future needs of people while ensuring the health and diversity of ecosystems.

NOXIOUS WEED CONTROL

Question: Montana has a serious noxious weed problem that in my view must be a priority--over other projects--such as the Grizzly Bear Interpretive Trail at Marias Pass--how does the Forest Service intend to prioritize weed control and management?

Answer: The Forest Service agrees that noxious weeds are a serious problem. All funds appropriated in FY 1995 for noxious weeds have been allocated.

AGENCY RULEMAKING PROCEDURES

Question: There is the question of accountability to the public, and to Congress when a proposed rule is opposed by the majority and implemented through a Special Order, which allows the agency to implement their objective in spite of views of the majority--would you agree that this process should be reviewed?

Answer: The Forest Service is always accountable to the public and the Congress, and its activities and behavior are constantly subject to monitoring and

oversight from Congress through both Committees and GAO, the media, the Secretary of Agriculture, other Federal agencies and the President, and from organizations that are interested in Forest Service programs. In addition, administrative appeals and litigation are methods of holding the agency accountable. As to whether the rule making process should be reviewed because the agency may implement an action contrary to majority view, the rule making process and all other decision making processes should be continually reviewed to ensure that decision criteria are sound and reasonable, and that officials are not arbitrary or capricious in their decision making. However, federal lands cannot be administered effectively through a voting process by which the majority of those who express views on a particular decision determine the use of land and its future. The agency must balance citizen viewpoints with the myriad of laws and regulations that apply along with the application of scientific information about the actual condition of forest resources and professional judgment about what actions should be taken to ensure achievement of the desired future condition.

Question: I am concerned about the public comment process-which seems to give an unfair advantage to any agency proposing a new rule-the agency has as much time and as many resources it needs to prepare the proposal-the public and elected officials are given 30 days to respond. In most cases the rules are published and folks are not even aware of the proposal until the comment period has nearly ended, there is something wrong with this picture and I'd like to hear your views on it.

Answer: Pursuant to Executive Order 12866 on Regulatory Review, agencies are to give the public a minimum of 60 days to comment on proposed rules, unless there is good cause for a shorter period. Such a "good cause" statement must be reviewed and concurred in by legal staff and be published as part of the rule making. The Forest Service often gives a 90-day comment period on proposed rules, and where time and circumstances permit, the agency extends public comment periods upon request and justification by individuals or groups.

The Forest Service has worked particularly hard in the past 12 months to improve its communications with Congress, interest groups, and individual citizens who are interested in proposed Forest Service rules. The announcement of the proposed rule is coordinated with field offices down to the forest and district levels. Information and possible questions and answers are provided in the event of local, state, or regional questions from the public. We also often give direct notice by mail to those who are known to be interested in Forest Service proposed rules. As part of our communication plan, we also encourage local offices to make sure that those local groups and citizens are made aware of the proposal. The rule making process is often

slow because of the necessity to ensure legal sufficiency, to conduct various environmental, economic, and regulatory analyses, and to obtain reviews within the Department of Agriculture, other Federal Departments, and the Executive Office of the President. While the process can be slow, the beneficiaries are the American public who receive a carefully considered proposal on which to comment.

QUESTION SUBMITTED BY SENATOR JOHNSTON

MISSISSIPPI DELTA STUDY

Question: Recommendations included in the Delta Initiatives 1990 Commission Report concluded that there is a pressing need for Federal technical and financial assistance to address and protect groundwater and surface water supplies in the Mississippi Delta. To address these findings, a total of \$3 million was provided in P.L. 103-330 through the Water Quality Incentive Program and The Soil Conservation Service to provide technical assistance for a pilot project in the Mississippi Delta region of Louisiana, Arkansas, and Mississippi.

Is NRCS supportive of this pilot project to address water quality in the Mississippi Delta? Has NRCS made any specific funding recommendations in the FY 1996 Budget that target the needs of rural areas in the Delta, particularly in areas with low income minority populations? What has been the focus of this project in the area of rural recycling and water resources? What level funding would be needed in FY 1996 to continue this project?

Answer: NRCS is supportive of this pilot to address water quality issues in the Mississippi Delta and funds are included in the FY 1996 budget request for this important study. The focus of the study is to identify the sources of pollution to surface and ground water supplies and to assist in the planning implementation of alternative solutions to solving these problems. The level of NRCS funding needed to continue this project in FY 1996 is \$800,000.

QUESTIONS SUBMITTED BY SENATOR KOHL

TECHNICAL ASSISTANCE TO FARMERS

As we approach the debate on the 1995 farm bill, and face the possibilities of reduced federal support for our farmers in response to budget constraints, I have been increasingly concerned about the costs that farmers face in their businesses.

In my state of Wisconsin, with dairy farming being the predominate form of agriculture, I am concerned about

the costs that farmers are facing in dealing with animal waste management. Animal waste can be a significant source of water pollution in States like Wisconsin. Clearly this must be addressed. But the cost of doing so can be very prohibitive.

Through the Conservation Reserve Program and other federal programs, we have provided a great deal of financial and technical assistance to farmers in dealing with soil erosion. I believe that the level of financial and technical assistance that USDA provides for livestock farmers in dealing with animal waste is far less. I have two questions regarding this concern:

Question: Could you provide the Committee with data to show how much financial and technical assistance has been provided, over the past 5 years, to address soil erosion from farmland, and how much financial and technical assistance has been provided during that same time period to address animal waste concerns?

Answer: NRCS has provided an estimated \$1,217,344,000 in technical assistance for soil erosion from farmland during the last 5 years through the Conservation Operations Program. In the same period, CFSA has provided an estimated \$364,590,000 in financial assistance to address soil erosion issues.

Currently, there are 243 P.L. 566 watershed projects in soil erosion control on our nation's farmland. The financial and technical assistance that has been provided over the past 5 years on these projects amounted to \$147,670,683 in financial assistance and \$63,287,436 in technical assistance. Ninety-seven watershed projects have water quality as a purpose, of those, 33 control animal waste.

During the last 5 years, the small watershed program funded \$9,303,293 in financial assistance and \$3,987,126 in technical assistance for animal waste management. NRCS also provided an estimated \$60,867,000 in conservation technical assistance funds to address animal waste issues. CFSA has provided an estimated \$81,020,000 in financial assistance for the same period.

Over the past 5 years, NRCS has provided \$178,535,600 in technical assistance funds to address five major nonpoint source pollutants creating water quality impacts; soil erosion and sedimentation, nutrients, pesticides, animal waste, and salts or toxics. Animal waste concerns are expressed in nearly all 90 USDA Water Quality Initiative projects nationwide. Technical assistance funds are provided to these project areas to address water quality problems resulting from agricultural non-point pollution sources. No attempt has been made to keep a separate accounting of funds by pollutant source. All sources treated impact water

quality. NRCS has spent an estimated \$3,534,300 in technical assistance funds for animal waste management over the past 5 years through the USDA Water Quality Initiatives.

CFSA, a USDA Water Quality Initiative partner, has provided an estimated \$8,514,000 in financial assistance funds during this same period for animal waste management.

Question: What is USDA doing to provide technical assistance to farmers on ways to reduce the cost of animal waste management? What research is being conducted to develop less costly animal waste management tools?

Answer: NRCS is continually working to improve the design standards for animal waste storage and handling facilities, incorporating the latest technology to reduce costs and improve animal waste management techniques. Although NRCS does not conduct actual research, we do assist other USDA agencies including Agricultural Research Service and Cooperative State Research, Education and Extension Service in developing new and innovative animal waste management technologies for incorporation in planning and implementation procedures.

Currently, new animal waste management tools include constructed wetlands for filtering barnyard and feedlot waste runoff, composting facilities and management techniques for animal waste and dead animal disposal and a variety of nutrient management techniques for disposal of animal waste on cropland including manure testing and nutrient balancing.

We are implementing 33 P.L. 566 watershed projects in animal waste management which could reduce the environmental cost and economic cost of waste management. We have spent \$3,987,126 in technical assistance for those projects in the past 5 years.

QUESTION SUBMITTED BY SENATOR BYRD

WATERSHED AND FLOOD PREVENTION PROGRAM

Question: Federal support of watershed and flood prevention programs have been vital to West Virginia. What is the agency's assessment of the current and future need of these programs in the State?

What will be the impact on the State if authorized watershed and flood prevention programs are not funded?

Answer: Within the authorized area of West Virginia, work activities are progressing well to address flood prevention, water quality, and other land and water resources problems. Under the PL 78-534, Flood

Prevention Program, Lost River Dam No. 4 is nearing completion (\$5.6 million) and construction of Lost River Dam No. 27 (\$8 million) will begin in June 1995. The contract for installation of the fishing facilities on North and South Mill Creek Dam No. 7 (\$1 million) has been awarded and work will start in April 1995.

In addition to the flood prevention activities, an extensive water quality program is underway to assist poultry producers and other landowners in addressing nonpoint pollution problems. An interagency agreement to coordinate assistance has been developed with Federal, State, and local agencies. In FY 95, over \$1.8 million of technical and cost-share assistance will be provided to producers by cooperating agencies. Accelerated assistance is also being provided to producers in controlling erosion on highly erodible lands. For better coordination of assistance, an interagency water quality office has been established in Moorefield, West Virginia. It is currently staffed by NRCS, Extension Service, and the West Virginia Soil Conservation Agency personnel.

The Watershed Protection and Flood Prevention Program (PL 83-566) has been used extensively in West Virginia to address flood prevention, water supply, water quality, and recreation needs throughout the State. Currently, West Virginia has obligated \$58.3 million of Federal funds in active contracts for eight projects. In addition, watershed protection is being implemented in three projects. This work includes technical and financial cost-share assistance for implementation of best management practices to protect and improve water quality and to maintain the land resource base for use by future generations.

In addition, West Virginia has viable projects for flood prevention, water supply, and recreation authorized for four projects for which funding has not been received. These projects remain viable and environmentally sound. We also are proposing a portion of future funds to be used to begin a concentrated stream protection and restoration program to address serious water quality problems.

The West Virginia allowance in FY 95 of \$5.5 million in both programs supports 73 staff years of technical assistance.

SUBCOMMITTEE RECESS

Senator COCHRAN. Our next hearing will be on next Wednesday, March 29, at 10 a.m., in this same room, 138 of the Dirksen Senate Office Building. At that time we will hear from Department witnesses and consider the budget request for the food safety and marketing and regulatory programs of the Department. Until then, the subcommittee stands in recess.

[Whereupon, at 11:26 a.m., Wednesday, March 22, the subcommittee was recessed, to reconvene at 10:11 a.m., Wednesday, March 29.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

WEDNESDAY, MARCH 29, 1995

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:11 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.
Present: Senators Cochran, Bumpers, and Kerrey.

DEPARTMENT OF AGRICULTURE

FOOD SAFETY AND INSPECTION SERVICE

STATEMENTS OF:

**MICHAEL R. TAYLOR, ACTING UNDER SECRETARY, FOOD SAFETY
PATRICIA JENSEN, ACTING ASSISTANT SECRETARY, MARKETING
AND REGULATORY PROGRAMS**

ACCOMPANIED BY STEPHEN B. DEWHURST, BUDGET OFFICER

OPENING REMARKS

Senator COCHRAN. The hearing will please come to order.

Today we continue reviewing the budget requests submitted by the administration for fiscal year 1996. Today we specifically look at the budget of the Food Safety and Inspection Service [FSIS], the Agricultural Marketing Service [AMS], and the Animal and Plant Health Inspection Service [APHIS].

Our witnesses are led by Michael Taylor, Acting Under Secretary for Food Safety and the Acting Assistant Secretary for Marketing and Regulatory Programs, Patricia Jensen, as well as Lonnie King, Lon Hatamiya, James Baker, and Stephen Dewhurst.

Mr. Secretary, why don't you proceed with any opening statements or remarks you would like to make. We have your written statement, which we appreciate very much. It will be a part of the record in full, along with any other materials that you have submitted to the subcommittee.

We welcome you and thank you for being here. You may proceed.

FOOD SAFETY MISSION

Mr. TAYLOR. Thank you, Mr. Chairman. It is a pleasure to be here before you today to discuss the President's budget request for the Food Safety and Inspection Service.

Our mission is to ensure that the Nation's commercial supply of meat, poultry and egg products is safe, wholesome, and accurately labeled. Our agency has a long, proud history of protecting consumers.

My goal as Administrator of FSIS is to build on that history and to improve the safety of meat and poultry products by putting in place a science-based inspection system that is based on the public health principle of prevention.

I look forward to working with the Congress to achieve this goal; and to be successful, we must work with all interested parties, including industry, the scientific community, other food safety agencies, and public interest groups.

But we must never lose sight of the fact that our real customer in this endeavor is the individual consumer of meat and poultry products. We must put the public health interests of consumers first as we develop our program.

NEED FOR CHANGE

The tragic outbreak of foodborne illness in early 1993 in several Western States that was attributed to undercooked hamburgers contaminated with *E. coli* 0157:H7 did serve as a catalyst for the change that we are bringing about.

Following the outbreak, the administration undertook many food safety initiatives, but it is clear that the job is far from done. It is time to make fundamental changes in how we carry out the job of inspection.

Our system needs to be updated from a primarily organoleptic system to one that makes better use of the science and tools of microbiology to reduce and, when possible, eliminate dangerous foodborne bacteria.

Our system must focus inspection and plant activities on prevention objectives, and it must strengthen industry responsibility to produce safe food.

HAZARD ANALYSIS AND CRITICAL CONTROL POINTS

On February 3, we took a giant step toward these fundamental changes in our program with the publication in the Federal Register of proposed regulations on pathogen reduction and hazard analysis and critical control points [HACCP]. These proposals would allow us to bring about a number of important changes.

First, plants that produce meat and poultry would be required to implement HACCP. Under HACCP, plant operators would evaluate potential hazards, devise and implement controls appropriate for each product and plant to prevent or reduce the hazards, and then monitor, verify, and document that the controls are working effectively.

FSIS inspectors in turn would verify the adequacy and proper execution of the HACCP plan through record review, product testing, and other inspection techniques.

Not only would HACCP improve food safety, but it would clarify that the industry is responsible for producing a safe product, and for working systematically to prevent food safety problems.

The proposals would also require plants to meet specified targets for reduction of pathogenic bacteria in raw products, which is a

first step toward greater reliance on food safety performance standards.

By adopting performance standards, we will stimulate the innovative capacity of the meat and poultry industry to produce safer products. Without such standards, we will lack a solid basis for judging whether a plant's HACCP plan is adequate.

Our proposal also addresses the immediate need for concrete improvements in the safety of meat and poultry by proposing that plants quickly implement three basic food safety practices that address sanitation, antimicrobial treatments, and cooling times and temperatures for beef carcasses.

All of these food safety improvements would apply to imported meat and poultry products, as well as to domestic products. The public must have confidence that the food they eat is safe regardless of its origin.

We have evaluated, Mr. Chairman, the costs and benefits of our proposals, and we have concluded that mandating HACCP systems would result in net benefits that far exceed industry implementation and operation costs.

The increased cost of compliance is estimated at slightly more than two-tenths of a cent per pound of product, which is clearly outweighed by the public health and economic benefits that will result from significantly reducing the 5 million cases of illness and more than 4,000 deaths that may be associated with meat and poultry products each year.

In addition to improving the current in-plant inspection program, we also emphasize the need to focus on the entire farm-to-table food safety continuum.

FARM-TO-TABLE FOOD SAFETY CONTINUUM

As a result of the USDA reorganization bill, the preharvest or animal production food safety activities previously carried out by APHIS are now the responsibility of FSIS.

Our new animal production food safety program will work with scientists and animal producers to find and implement measures from the farm to the slaughter plant to control pathogenic microorganisms and chemical residues.

FOOD SAFETY TRANSPORTATION STANDARDS

In addition to our activities at the animal production level, we are working with FDA to establish Federal standards for the safe transportation of foods after they leave inspected facilities and to ensure food safety at the retail level by encouraging States to adopt and enforce consistent, science-based food safety standards.

CONSUMER EDUCATION

We will also continue our food handler education programs to inform the public and those who prepare and serve food to the public about proper handling, preparation, and storage of meat and poultry products to minimize the growth of foodborne pathogens.

We do not believe consumer education should be a substitute for an effective food safety program, but even under the most ideal

food safety program, mistakes by food handlers can lead to foodborne illness.

As we design a food safety program for the future, we are committed to fully involving the public in our decisionmaking process.

We have planned an extensive outreach effort around the country to facilitate understanding of our recently published regulatory proposals. We will also work with all interested parties in developing the remainder of our farm-to-table strategy.

PATHOGEN REDUCTION INITIATIVES

Let me mention, Mr. Chairman, another couple of initiatives that are underway that relate very much to our goal of building a science-based program.

We have established within the Food Safety and Inspection Service an epidemiology and emergency response program, which will study the epidemiological links among outbreaks of foodborne illness and the meat and poultry products associated with them.

Our goal is to apply the knowledge we gain from epidemiological investigations to design, implement, and evaluate the effectiveness of strategies to prevent future outbreaks.

We are also continuing to develop baseline data on the frequency and levels of pathogenic microorganisms in the meat and poultry products we regulate.

The data we are generating will help us to develop health-based standards for pathogenic microorganisms. A proposal for interim targets for microbial pathogens is an initial step toward this goal.

FLEXIBILITY FOR INDUSTRY INNOVATION

As we build our base of scientific knowledge, we can adjust these targets accordingly to meet our public health goals. Our scientific efforts and our pathogen reduction and HACCP proposals are all aimed at improving our ability to achieve our food safety objectives, but there is still more that we can do.

We must also ensure that our existing regulatory procedures that have built up over the years and our command and control food safety requirements are consistent with our HACCP strategy and that we do not, as an agency, serve as an obstacle to the kind of innovative steps the industry can take to improve food safety.

We believe the industry must have the freedom to innovate and to improve food safety, and it must be given the flexibility to work within a HACCP framework.

We will be reviewing, and we will go through a public process to solicit input from industry and all interested parties on our current regulatory procedures and requirements with the objectives again of streamlining these requirements as appropriate.

To achieve our food safety goals, we must also manage our resources with care and creativity. In the coming year, we will be conducting a top-to-bottom review of our agency's inspectional roles, resource allocation, and organizational structure to be sure we are well prepared to make the best use of our resources as we implement the HACCP-based system of the future.

1996 BUDGET REQUEST

Let me turn now, Mr. Chairman, to the specifics of our budget request for 1996. We are making a current law request of \$594.9 million, an increase of \$61.7 million over the amount currently available for 1995.

This proposal includes an increase of \$23.8 million for mandatory cost increases, such as those related to pay increases. We are also requesting an increase of \$19.6 million to fill critical inspector vacancies.

PATHOGEN REDUCTION PROGRAM

An additional \$11.9 million is requested for the pathogen reduction program. This is the investment program for the future. This increase will foster future improvements in the control of microbial contamination of meat and poultry products from farm to table.

For example, we want to accelerate the nationwide microbiological baseline studies, strengthen testing programs for microbial pathogen-involved products, develop incidence levels for foodborne diseases, implement new HACCP-based inspection procedures, including the essential HACCP training for the inspection work force; and we also need to expand our risk assessment program.

We are also requesting an additional \$1.5 million for enforcement and compliance activities under the pathogen reduction program and \$545,000 for our consumer awareness program.

The request finally includes an increase of \$812,000 to carry out the animal production segment of the pathogen reduction program.

In addition to these pathogen-reduction increases, Mr. Chairman, FSIS is requesting an increase of \$8.4 million to initiate the Field Automation and Information Management [FAIM] Program, which would provide automation equipment to in-plant and other field personnel.

The costs of investing in this program will be partially offset by a \$1 million reduction resulting from streamlining the existing field operations, as well as other administrative functions, which are supported by this field automation.

I cannot stress too strongly, Mr. Chairman, how vital these investments are to improving the safety of meat and poultry products in building the foundation for a science-based, HACCP-oriented inspection program.

Without these investments in our pathogen reduction program, we will be unable to meet the public's legitimate food safety expectations, and we will be stymied in our efforts to move toward the modernized system of inspection that we all desire.

PROPOSED LEGISLATION—USER FEES

FSIS is proposing, as you know, Mr. Chairman, legislation to recover \$106.8 million in user fees for 1996 by charging plants for inspection services provided beyond a single approved production shift.

The legislative proposal, in our judgment, addresses current fiscal realities and will put all plants on a more equal footing in terms of the costs they incur for inspection services.

1995 SUPPLEMENTAL APPROPRIATIONS REQUEST

And finally, the 1996 budget reflects a supplemental funding request for 1995 of \$9.1 million to help meet the costs which are not adequately covered by current appropriations. We appreciate the action by this committee on that request and your support of that.

Mr. Chairman, this concludes my prepared statement. I am accompanied today by Dr. Reed, and we certainly would be happy to answer any questions you may have about the Food Safety and Inspection Service budget.

PREPARED STATEMENT

Senator COCHRAN. Thank you very much, Mr. Secretary. We have your complete statement and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF MICHAEL R. TAYLOR

Mr. Chairman and Members of the Subcommittee, I am pleased to appear before you today to discuss the President's fiscal year 1996 Budget request for the Food Safety and Inspection Service (FSIS). As you may know, I have served as the Administrator of FSIS since August 1994, and was appointed as Acting Under Secretary for Food Safety in October 1994.

Before I discuss our budget request for fiscal year 1996, I would like to briefly summarize the responsibilities and activities of the Food Safety and Inspection Service.

CURRENT INSPECTION ACTIVITIES

The meat and poultry inspection program has a long, proud history of protecting the public health. Our mission is to ensure that the Nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and accurately labeled, as required by the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act.

Federal inspectors are present at least daily in the approximately 6,300 plants that slaughter cattle, swine, sheep, goats, horses, chickens, and turkeys, as well as produce approximately 250,000 different processed products, including hams, sausage, stews, pizzas, and frozen dinners. The products regulated by FSIS account for a third of consumer spending for food, with an annual retail value of \$120 billion.

In addition to inspecting animals before and after slaughter, our inspectors provide samples to laboratories to test for the presence of violative drug and chemical residues. FSIS also sets standards for a range of activities associated with the production of meat and poultry products, including the use of equipment, sanitation procedures, and product labeling.

In fiscal year 1994, our domestic inspectors examined over 81 billion pounds of meat and poultry for public consumption. While the inspection of domestically produced meat and poultry is a priority, we also recognize the vital importance of inspecting imported products. To ensure the safety of imported meat and poultry, FSIS maintains a comprehensive system of import controls to carry out the requirements of the Federal meat and poultry inspection laws.

The system of import controls involves two major activities. The first is oversight to ensure that exporting countries have inspection controls at least equal to those of the United States. Such countries must undergo a rigorous review process before they can become eligible to export meat and poultry to the United States, and periodic review are carried out to maintain such eligibility.

The second component of the import control program is the reinspection, on a sample basis, of meat and poultry products as they enter the United States. Reinspection is a check to make sure that the foreign country's inspection system is working. This reinspection is carried out by approximately 75 import inspectors covering approximately 150 active import inspection locations. In 1994, approximately 3 billion pounds of imported meat and poultry products were passed for entry into the United States.

Another part of our food safety program involves laboratory analysis, which provides scientific and technical support to inspectors through laboratory testing for

chemical and antibiotic residues, microbiological contamination, pathology diagnostics, processed product composition, and economic adulteration.

FSIS currently operates three multidisciplinary laboratories supplemented by the use of two contract laboratories, and accredits approximately 200 private laboratories to carry out food safety and composition tests. During fiscal year 1994, over 464,000 analyses were performed on meat and poultry samples by federally operated or contract laboratories.

FSIS also conducts enforcement and compliance activities to ensure that products are safe, wholesome, and accurately labeled. FSIS investigates cases of administrative, civil, or criminal violation of meat and poultry regulations and works in conjunction with the USDA Office of the General Counsel and the Department of Justice to correct violative problems and prosecute offenders, if necessary.

In fiscal year 1994, 46,211 compliance reviews were conducted. As a result of these reviews and other compliance activities, 22 million pounds of meat and poultry were detained for noncompliance with meat and poultry laws. Forty-five recalls were conducted involving over 2 million pounds of product. In addition, 24 convictions were obtained against firms and individuals for violations of the meat and poultry inspection laws.

PUBLIC HEALTH—THE NUMBER ONE GOAL

I came into this job with the clear charge to improve the safety of meat and poultry products by putting in place a science-based inspection system. To be successful, we must work with all interested parties, but our real customer is the individual consumer of meat and poultry products. We must put the public health interests of the consuming public first as we develop our program.

The tragic outbreak of foodborne illness in early 1993 in several western states attributed to undercooked hamburgers contaminated with *E. coli* 0157:H7 certainly has served as a catalyst for change. Following the outbreak, the Administration followed through with many food safety initiatives.

- E. coli* 0157:H7 in raw ground beef was declared to be an illegal adulterant and a program was initiated to sample for the pathogen.
- The approval process for antimicrobial treatments was streamlined to help the beef industry move faster to install new technologies to reduce pathogens.
- Unannounced reviews were conducted to enforce inspection requirements.
- Safe cooking and handling instructions were made mandatory on the labels of raw and partially cooked meat and poultry products.
- Our policy to not allow fecal and other contamination of meat and poultry was strengthened.
- Funding for food safety research by the Department's Agricultural Research Service was increased to prevent contamination of animal products with foodborne pathogens.
- And finally, food safety was elevated to a sub-Cabinet-level responsibility within the Department of Agriculture, and pre-harvest food safety activities previously carried out by the Animal and Plant Health Inspection Service (APHIS) and egg products inspection functions previously carried out by the Agricultural Marketing Service (AMS) are now being consolidated into FSIS to allow for better coordination of our farm-to-table food safety strategy.

Each of these steps is important, but it is clear that the job is far from done. It is time to make fundamental changes in how we carry out the job of inspection.

Fundamental change does not come easily. But we must ask ourselves whether we are going to enter the next century—and the next millennium—with a new, science-based system of inspection, or are we going to stay with one that has remained virtually unchanged for 90 years? I believe the answer to this question is clear. We must move forward.

FSIS INITIATIVES TO IMPROVE FOOD SAFETY

Our agenda for change at FSIS is grounded in the expectations of the American public when it comes to the safety of the food supply. People know very well that the safety of their food is not an absolute. But they expect—and they have a right to expect—that those who offer food for sale in the commercial marketplace, and we in government who oversee the safety of the food supply, have done everything that is reasonably possible to do to maximize its safety.

Our agenda for change is not only based on public expectations, but on the public health reality of foodborne illness. We have millions of cases of foodborne illness each year and thousands of deaths, many of which are associated with meat and poultry products, and many of which are preventable.

To address this public health reality and meet the public's food safety expectations, our inspection system needs to be updated from a primarily organoleptically based system to one that makes better use of the science and tools of microbiology to reduce, and when possible, eliminate dangerous foodborne bacteria. The current system addresses pathogens only indirectly, by enforcing sanitation requirements and inspecting for visible contamination and defects.

Our new system must also focus inspection and plant activities on prevention objectives. And it must strengthen industry responsibility to produce safe food.

These changes will better protect public health in the United States, but they will also support international harmonization of food safety standards. Hazard Analysis and Critical Control Points (HACCP) is becoming the world-wide standard to ensure the safety of food and will thus serve as the basis for harmonizing U.S. food safety regulations with those of other Nations. Adopting a HACCP system will help improve the safety of imported meat and poultry and potentially enhance international trade opportunities for the United States.

PROPOSED REGULATIONS ON PATHOGEN REDUCTION AND HACCP

On February 3, we took a giant step toward making fundamental changes in the job of inspection with the publication in the Federal Register of proposed regulations on Pathogen Reduction and HACCP. The proposal, which is not about more regulation, but instead about better and smarter regulation, would allow us to bring about a number of important changes.

For the first time, we would require plants to meet specified targets for pathogenic bacteria in raw products.

For the first time, plants that produce meat and poultry would be required to implement HACCP, a process control system designed to prevent physical, biological, and chemical adulteration throughout the production process.

For the first time, we would clarify that the industry is responsible for producing a safe product by requiring the industry to assess the risk of contamination and to implement a plan to eliminate those risks throughout the production process.

The proposal addresses the immediate need for concrete improvements in the safety of meat and poultry and begins the process of transforming the inspection program into a science-based system.

Under HACCP, plant operators would be required to evaluate potential hazards, to devise and implement controls appropriate for each product and plant to prevent or reduce the hazards, and to monitor, verify, and document through records that the controls are working effectively. FSIS inspectors would verify the adequacy and proper execution of the HACCP plan through record review, product testing, and other inspection techniques. HACCP verification would necessarily expand the roles of in-plant inspectors, and HACCP would enhance the contribution they can make to ensuring the safety of food. FSIS has already begun working with its inspectors' union and other employee organizations to formulate a plan for the optimal use of inspectors for each element of this proposal.

The proposed timeframe for implementing HACCP attempts to balance the need to allow adequate time to implement so significant a change and the need to move quickly to improve food safety. We are proposing that implementation would be phased-in, based on the type of production process. Implementation for processes associated with the greatest public health risk would begin 12 months after publication of the final rule. Implementation would be complete three years following the publication of the final rule.

In order to measure an acceptable level of food safety performance when it comes to the problem of contamination with pathogenic microorganisms, the regulation adopts performance standards, which will stimulate the innovative capacity of the meat and poultry industry to produce safer products. Without such standards, we will lack a solid basis for judging whether a plant's HACCP plan is achieving the public health goals of the regulation.

We are proposing interim targets for pathogen reduction that all plants would be required to achieve, and we would require daily microbial testing to determine whether targets are being met. Plants not meeting the target within a specified period would be required to take remedial measures under FSIS supervision.

We propose to focus initially on *Salmonella*, which is the leading cause of foodborne illness associated with meat and poultry products. Plants would be required to achieve targeted reductions in the incidence of *Salmonella* in relation to the current national baseline incidence. FSIS has used data from its Nationwide Microbiological Baseline Data Collection Program as the basis for the proposed baseline assigned to the various raw commodities. The baseline for those commodities where FSIS baseline studies have not been completed are estimates based on the

best data currently available to the Agency. The Agency recognizes that the data available for some species are limited. We believe, however, that this rulemaking will generate additional data that will help refine the baseline tentatively identified in the proposed regulation.

Microbiological testing would begin 90 days after the final rule is published, and tracking of test results would begin 6 months after the final rule is published.

As I said earlier in reference to HACCP, we are attempting to balance the need to allow adequate time to implement significant changes with the need to move quickly to improve food safety. Since HACCP will take some time to implement, we are responding to the need to move quickly by identifying three basic food safety practices that many plants already follow and that we believe all plants should implement now. Under our proposal, plants would be required to implement these three near-term interventions 90 days after publication of the final rule. The near-term interventions would be incorporated into HACCP plans when HACCP is implemented.

Under the first near-term intervention, each plant would be required to adopt a written plan or standard operating procedures for meeting its sanitation responsibility. Good sanitation is essential to a safe food production process, but, too often, plants rely on FSIS inspectors to detect and correct sanitation problems rather than take responsibility themselves.

Second, we propose that all slaughter plants adopt at least one effective antimicrobial treatment before the carcass enters the chill step. These treatments must not substitute for sanitary dressing measures to prevent contamination in the first place. But they can help reduce the risk that a carcass will leave the slaughterhouse floor with dangerous levels of pathogenic microorganisms.

Third, we are proposing standard cooling times and temperatures for beef carcasses, comparable to current cooling requirements for poultry.

These requirements—HACCP, interim targets for pathogen reduction and microbial testing, and near-term interventions—would apply to imported meat and poultry products as well as to domestic products. The public must have confidence that the food they eat is safe, regardless of its origin.

FSIS has prepared a preliminary regulatory impact assessment that evaluates the costs and benefits of a mandatory HACCP regulatory program and related near-term initiatives for all meat and poultry plants under inspection. Our assessment concludes that mandating HACCP systems would result in net benefits that far exceed industry implementation and operation costs. We estimate the total implementation costs of our proposed requirements to the meat and poultry industry at \$733.5 million, or an average of \$244.5 million per year. Yearly public health benefits from reduced foodborne illness costs, including medical care and lost work time, would range from \$990 million to \$3.7 billion. The increased cost of compliance is estimated at slightly more than two tenths of a cent per pound—which is clearly outweighed by the public health and economic benefits that will result from significantly reducing the 5 million cases of illness and more than 4,000 deaths that may be associated with meat and poultry products each year.

OTHER FOOD SAFETY INITIATIVES

In addition to improving the current in-plant inspection program, we also acknowledge the need to focus on the entire farm-to-table food safety continuum. Ensuring food safety requires taking steps throughout the chain of production, processing, distribution, and sale to prevent hazards and reduce the risk of foodborne illness.

Several of our initiatives address the need for better, more scientific data to help us improve our food safety programs. For instance, we expect to collect and analyze data through our newly established Epidemiology and Emergency Response program. We are pleased to have Dr. Glenn Morris, an infectious disease expert, on board as the staff's director.

The staff will study the epidemiological links among outbreaks of foodborne illness and explore what relationships may exist between outbreaks and the types of meat and poultry products associated with them. We believe that the rise in cases of foodborne disease is not just the result of improved diagnostics and reporting, but that it may reflect real increases in foodborne infectious diseases. FSIS is providing public health and epidemiology training to FSIS and APHIS field employees so they can help investigate outbreaks of foodborne illness and provide a more direct communication link to the State public health experts. Our goal is to apply the knowledge we gain from epidemiological investigations to design, implement and evaluate the effectiveness of strategies to prevent future outbreaks.

We will also work with the Centers for Disease Control and Prevention (CDC) and FDA to obtain improved data on the incidence of foodborne diseases. This innovative project will help better define the actual numbers of illness, the causes of foodborne disease, and the effectiveness of future food safety interventions.

A major goal of FSIS is to set health-based standards to evaluate whether measures taken by establishments to prevent harmful contamination are achieving the public health goal of minimizing illness. Epidemiological data and risk assessments are needed to develop these standards. This is a complex task, however, that will require much more data than we have at this time. As an initial step, we are proposing to set targets for microbial pathogens based on the data we have now. As we build our base of scientific knowledge, we can adjust these targets accordingly to meet our public health goals.

One way we are adding to our databases for microbial pathogens is through our ongoing Nationwide Microbiological Baseline Data Collection Program. Data from these surveys is providing us with information on the type and level of microbial contamination on raw products produced under Federal inspection. Under our proposed regulation on pathogen reduction and HACCP, we are proposing to use data from this program, coupled with additional data we expect industry to provide, to help set targets for microbial pathogens in raw meat and poultry.

Our first baseline collection study—for steers and heifers—was completed in 1993. We recently completed our baseline study on cows and bulls and will report the results as soon as the data are analyzed. A similar survey of poultry began in July 1994; one for pork began in January 1995.

Another area where data are needed is animal production food safety. As a result of the USDA reorganization bill, the pre-harvest food safety activities previously carried out by APHIS are now the responsibility of FSIS. Our new Animal Production Food Safety program will work with scientists and animal producers to find and implement measures from the farm to the slaughter plant to control pathogenic microorganisms and chemical residues. Our approach is to work collaboratively with public and private entities that have a stake in animal production food safety. We have not yet reached the point where we can develop model programs to reduce on-farm pathogens, but that is our goal.

To collect the data we need to meet this goal, we intend to take a number of steps. First, we plan to establish an interagency coordinating committee to link agencies within USDA with the Center for Veterinary Medicine at the FDA and CDC to coordinate Federal activities on animal production food safety to make better use of our resources and reach our goals more efficiently. In addition, we intend to convene this spring a very broad, diverse Animal Production Food Safety Forum and invite producers, processors, government agencies, consumer groups, university-based scientists, the veterinary community, and others interested in food safety to work with us as we develop our strategy.

We are pleased to have Dr. Bonnie Buntain on board as the director of this program. Dr. Buntain came to FSIS from APHIS, where she was the leader of the APHIS food safety project team and served on USDA's Pathogen Reduction Task force. Dr. Buntain and her staff will continue to work closely with a number of Federal agencies and with external groups as we pursue our animal production food safety strategy.

In addition to our activities at the animal production level, we are working with the Food and Drug Administration (FDA) to establish Federal standards for the safe transportation of foods. We will also work with FDA to ensure food safety at the retail level by encouraging States to adopt and enforce consistent, science-based standards.

While our data needs are great in many areas, we cannot wait until we have all of the data we need to begin taking action. We must address public health threats immediately. That is why we have taken such decisive action on *E. coli* 0157:H7.

The outbreak attributed to undercooked hamburgers served at fast food restaurants occurred in January 1993. On August 2, 1993, we set new heating, cooking, handling, labeling, and storage requirements for uncured meat patties produced and packaged at inspected plants. In September 1994, we announced that we consider raw ground beef that is contaminated with *E. coli* 0157:H7 to be adulterated within the meaning of the Federal Meat Inspection Act. In October 1994, we began testing for *E. coli* 0157:H7 in ground beef from plants and retail stores. When contamination is found, FSIS detains the product and requires that it either be destroyed or reprocessed in a manner that kills the organism.

After an outbreak of foodborne illness in California and Washington state in November 1994 was linked to *E. coli* 0157:H7 in ready-to-eat sausage, industry and USDA officials agreed that action was required to minimize the risk of future outbreaks of illness from this dangerous bacteria. On January 25, 1995, we outlined

two options from which industry could choose to ensure the safety of these products. They could follow USDA procedures to validate the adequacy of their production processes. Or, they could adjust their processes to include a heat treatment that would destroy pathogens that might be in the product. We also announced we would begin sampling fermented sausage products for the pathogen; that testing will begin in March.

Our commitment to taking decisive action regarding public health threats is also reflected in our strong enforcement programs. For instance, we have nearly completed our special, unannounced reviews of meat and poultry plants as part of our continuing effort to strengthen enforcement of our regulations. We will report the results when the reviews are completed and the results are analyzed.

In addition, FSIS will continue its comprehensive food handler education programs to inform the public and those who prepare and serve food to the public on how to properly handle, prepare, and store meat and poultry products to minimize the growth of foodborne pathogens. We do not believe consumer education should be a substitute for a high-quality food safety program. But it is an essential part of an effective food safety strategy—particularly after products leave federally inspected plants. Even under the most ideal food safety program, mistakes by food handlers can lead to foodborne illness outbreaks. This is especially true in large-scale feeding programs found in schools, hospitals, and restaurants. One mistake can lead to hundreds of illnesses.

Regulations on safe handling labels, which are now required on all raw meat and poultry products, is one example of an educational strategy we have implemented. These labels put important food safety information where it is most needed—at the point of food purchasing and preparation.

In addition to safe handling labels, we are using other techniques to educate the public about the hazards of *E. coli* 0157:H7 and other foodborne pathogens. For instance, we initiated a nationwide outreach program directed at school children. We also prepared and distributed information to fast food restaurants and food service industry groups.

We are also reaching consumers through new labeling policies. For instance, on January 17, 1995, we published a proposed rule in the Federal Register to prohibit the use of the term “fresh” to describe poultry that has been previously frozen. This proposal does not directly address food safety but is important in meeting consumer expectations regarding use of the term “fresh.”

We also are proposing to require mechanically separated poultry to be identified in the ingredients statement of hot dogs, bologna, and other processed products as “mechanically separated chicken or turkey” instead of simply “chicken” or “turkey.” The proposed labeling change will inform consumers that some poultry products are made from a mechanical separation process.

We also are allowing meat produced by advanced meat and bone separation machinery to be labeled as “beef” or “pork,” for example, instead of “mechanically separated beef or pork.” We have determined that the meat produced by the modern, high-tech machinery is comparable in appearance, texture, and composition to meat trimmings and similar meat products and can fairly be identified as “meat.” The machinery does not crush or grind bones to remove skeletal tissues from bones like machinery used to produce mechanically separated meat.

These changes in labeling policies are not only designed to better meet consumer expectations but are a good example of our intent to equalize the regulations for all species. Some of them also reflect the need to keep our regulations up-to-date with current science and technology.

As we design a food safety program for the future, we are committed to fully involving the public in our decision-making process. We have planned an extensive outreach effort around the country to facilitate understanding of the our recently published regulatory proposal. We also will work with a variety of groups in developing the remainder of our farm-to-table strategy.

REFOCUSING RESOURCES

The activities I have just reviewed are all aimed at improving our ability to perform our core food safety objectives. But there is more we can do. We must also ensure that our existing regulatory procedures and requirements are consistent with our HACCP strategy and do not serve as obstacles to innovative steps the industry could take to improve food safety.

We must remove any unnecessary constraints that our programs impose on industry. The industry must have the freedom to innovate to improve food safety and it must be given the flexibility to work within a HACCP framework.

It is important that we carry out this initiative thoughtfully. We cannot make changes without careful attention to the impact these changes may have on public health.

We also must examine the impact of any changes on our work force. Many potential changes could affect the basic structure of our inspection program. Any changes that affect our inspectors will require consultation with employee groups.

We are now conducting a total review of our food safety regulations to bring them into accord with the HACCP principles reflected in the HACCP regulatory proposal. We want to eliminate unnecessary "command and control" regulations that spell out in minute detail how the plant must operate. We believe that it is preferable to set performance standards based on current science and then allow the industry to decide how it can best meet these standards. This shift will encourage industry innovation to improve food safety and reduce the industry's regulatory burden as well.

A good example of how this would work involves our prior approval programs. Currently, FSIS reviews and approves all plant blueprints, facilities, and equipment before they are put into service. We also review and approve all labels for meat and poultry products. In addition, we review and approve quality control programs that focus on non health related matters—such as controlling added water.

We have identified all of our prior approval programs and have begun the process of reviewing them to determine whether they should be modified or eliminated. We would not propose eliminating critical functions but want to explore whether alternatives exist for meeting their objectives more efficiently and effectively.

We intend to follow an analytical process to identify the objectives of the function, identify alternatives, and examine the impact of these alternatives on public health and other issues. We also will explore whether specific changes should involve rule-making to solicit public input.

We believe there are changes we can make to refocus our resources in a manner that best addresses our public health responsibilities. For instance, we plan to streamline our International Programs field structure by eliminating six import field offices. This move will reduce supervisory and support staff and administrative costs and allow us to perform our import inspection functions more efficiently.

We are pilot testing the Field Automation and Information Management (FAIM) system, which will modernize the inspection program by providing computers and electronic capabilities to our inspection force. This system has been tested in our import program and was one factor in allowing us to close six import field offices. We believe the system will allow us to make comparable improvements in efficiency in our domestic inspection program while improving the services we provide to industry.

We are also exploring changes in our headquarters management structure to better use our resources. For instance, we intend to explore combining the management structures of our Inspection Operations Staff, which carries out domestic inspection, and our International Programs Staff into one inspection structure.

In the coming year, we will be conducting a top to bottom review of our agency's inspectional roles, resource allocation, and organizational structure to be sure we are well prepared to make the best use of our resources as we implement the HACCP-based system of the future.

1996 BUDGET REQUEST

For fiscal year 1996, we are making a current law request of \$594.9 million—an increase of \$61.7 million over the amount currently available for 1995. This proposal includes an increase of \$23.8 million for statutory pay cost increases. As required by statute, we are required to provide inspection of all slaughter and processing plants. Inspection services must be provided to any company that requests such service. In order to meet this obligation, we must be able to fill critical inspector vacancies that exist under the current system. To accomplish this, we are requesting an increase of \$19.6 million.

An additional \$11.9 million is requested for the Pathogen Reduction Program (PRP), which was initiated in 1993 to develop scientific methods that could be used to reduce the likelihood that harmful pathogens will enter the food supply. The program includes animal production activities, development of rapid analytical methods, analysis of slaughter and processing operations to reduce pathogens, education programs for food service and retail employees, and consumer education. So far, funds provided for PRP activities have been used to implement the Clean Meat Initiative, which reinforced our requirements for the removal of fecal contamination from meat and poultry carcasses, to provide food handling information to those individuals who serve food to the public, and to carry out the Nationwide Microbiological Baseline Data Collection Program. The increase for fiscal year 1996 will fos-

ter further improvements in the control of microbial contamination of meat and poultry products from farm to table.

Of the \$11.9 million increase, \$3.1 million will be used to accelerate the nationwide microbiological baseline studies, which are necessary as we develop targets or standards for reducing pathogen levels in meat and poultry products. Funding for the Pathogen Reduction program will also allow FSIS to strengthen testing programs for microbial pathogens in raw products; develop incidence levels for foodborne diseases; implement new HACCP-based inspection procedures, including essential HACCP training for the inspection work force; and expand the risk assessment program.

We are also requesting an additional \$1.5 million for enforcement and compliance activities under the Pathogen Reduction program. This investment will enable FSIS to carry out plant reviews to ensure that the industry is observing proper safety procedures. Additionally, we are requesting \$545,000 for our Pathogen Reduction program consumer awareness program. This funding will enable FSIS to provide education on safe food handling to food handlers as well as to industry. The request also includes an increase of \$812,000 to carry out the animal production, or live animal, segment of the Pathogen Reduction program. Through this program, FSIS will work with scientists and animal producers to find and implement measures from the farm to the slaughter plant to control pathogenic microorganisms and chemical residues. The remaining \$6 million of the \$11.9 million will be used for the development of in-plant interventions to reduce pathogen loads and initiatives in quantitative risk assessment research and HACCP microbiological monitoring.

In addition to these increases, FSIS is requesting an increase of \$8.4 million to initiate the Field Automation and Information Management (FAIM) program. FSIS inspection personnel are widely dispersed throughout the country, yet the inspection system requires the ability of these various points to communicate large volumes of complex information rapidly. Such information includes instructions, laboratory test results, and current technical and managerial information. The current system, which relies on mail and telephone communication, cannot fulfill the agency's requirements. The FAIM program would alleviate this problem by providing automation equipment to in-plant and other field personnel. The costs of investing in this program will be partially offset by a \$1.0 million reduction resulting from streamlining the existing field structure as well as other administrative functions supported by field automation.

The total increase for the Agency of \$61.7 million also includes \$0.3 million for the egg products inspection *Listeria monocytogenes* testing program. This increase will provide for exploratory sampling in evaluating the risk of thermal-resistant pathogens in egg products and will enable the completion of joint research with the Agricultural Research Service.

These investments are vital to improving the safety of meat, poultry, and egg products and building the foundation for a science-based, HACCP-oriented inspection system.

FSIS is also proposing legislation to recover \$106.8 million in user fees by charging plants for inspection services provided beyond a single approved production shift. Currently, FSIS provides inspection free of charge to plants that regularly operate second shifts. But plants that operate for less than a full second shift must pay fees for overtime inspection services.

Under this proposal, FSIS would provide inspection services at no charge to the plant for one primary shift, and plants would incur the full cost of any inspection services beyond the primary shift. The legislative proposal addresses current fiscal realities and will put all plants on more equitable footing in terms of the costs they incur for inspection services. This proposal is expected to have a negligible impact on food prices.

The 1996 budget reflects a 1995 supplemental funding request of \$9.1 million to address costs that are not adequately covered by current appropriations. These funds are necessary to reduce severe funding problems resulting from the 1995 Appropriations Act. In 1995, FSIS was appropriated the same spending authority for meat and poultry inspection as it was in 1994. This action left the Agency without the necessary funding to carry out its basic mission.

At this time, no combination of ordinary spending restraints, such as employment attrition and spending restrictions, can significantly close the gap between FSIS' 1995 available funding and its expected obligations. At this time the greatest savings would be brought about through a full-year employment freeze throughout the entire agency. Such a freeze would erode the agency's infrastructure in terms of qualified personnel, widely disrupt the inspection program, and result in denial of services to meet production demands. The requested supplemental appropriation for

FSIS would enable the Agency to address its fiscal year 1995 payroll responsibilities while seeking other means to support program reforms in fiscal year 1995.

CONCLUSION

Mr. Chairman, this concludes my prepared statement. Thank you for the opportunity to testify on the priorities of our Agency. I will be happy to answer any questions that you or the other members of the subcommittee may have.

BIOGRAPHICAL SKETCH

MICHAEL R. TAYLOR

Michael R. Taylor was named Acting Under Secretary for Food Safety on October 20, 1994, after that position was created by the USDA reorganization act approved by Congress on October 5, 1994. He has served as administrator of USDA's Food Safety and Inspection Service since August 15, 1994, and continues in that capacity. As Acting Under Secretary for Food Safety, Taylor has responsibility for leading USDA's food safety activities.

Before joining USDA, Taylor served for three years as deputy commissioner for policy at the Food and Drug Administration, where he oversaw FDA's policy development activities and the processing of all FDA regulations. He was a partner in the Washington, D.C., law office of King & Spalding, specializing in food and drug law, from 1984-91, after having been an associate in the firm from 1981-84. He was the executive assistant to the FDA commissioner from 1980-81, after having worked as an attorney in FDA's Office of the General Counsel from 1976-80. He served in the U.S. Army from 1971-73.

Taylor was a member of the editorial board of the Food Drug Cosmetic Law Journal from 1988-91. From 1985-87 he served as a member on the National Academy of Sciences' Committee on Scientific and Regulatory Issues Underlying Pesticide Use Patterns and Agricultural Innovation. He has written and lectured extensively on legal and policy matters affecting food safety regulations.

Taylor holds a B.A. degree in political science from Davidson College in Davidson, N.C., and a J.D. degree from the University of Virginia in Charlottesville.

REGULATORY STREAMLINING

Senator COCHRAN. A couple of comments—and we appreciate very much your explanation of some of the plans in the food safety and inspection area, particularly for modernizing and bringing more scientific-based processes to bear on the effort to ensure that we have a wholesome and nutritious and safe supply of foodstuffs available to our consumers.

In that connection, with the new rules that you are implementing and putting in place, have there been any archaic or out-of-date processes or procedures identified that could be eliminated without sacrificing food safety in the process, some things that could be done to reduce the costs of the regulatory process?

Mr. TAYLOR. We are looking very hard at those possibilities, and let me mention one example that we intend to invite public comment on and really seriously evaluate.

We have built up a whole series of procedures over the years that involve the agency requiring prior approval in Washington of new facilities and new equipment. Any significant changes in the technologies used in meat and poultry plants must be approved under the current system in advance by FSIS, often in Washington.

We question whether in a HACCP environment, an environment in which we want to hold the companies accountable for meeting their food safety responsibility, whether that degree of command and control oversight is really justifiable.

These procedures serve certain purposes. We need to be thoughtful as we review that kind of existing mechanism. We intend, in

the next several weeks, to publish a notice in the Federal Register which will describe all of these existing procedures and invite public comment on how they can be improved or eliminated in order to make our system more efficient, to provide for better use of our resources and also better use of industry resources and an ability to foster, again with a more flexible regulatory environment, the kind of innovation that can improve food safety.

We intend in that same notice to invite input from the public on any other of our regulatory requirements currently in place that people believe might best be refined or eliminated, again as appropriate, to be consistent with the HACCP Program.

So we do need to look very hard at our existing requirements, and we intend, in parallel with our HACCP rulemaking, to go through a public process and get rid of the ones that do not make sense anymore.

Senator COCHRAN. I have some other questions, and I intend to ask them, and I also intend to call on Ms. Jensen for any statement that she might have before we proceed with further questions.

But I am going to stop at this point and recognize my distinguished colleague from Nebraska for any comments or questions he might have at this point.

INSPECTION COST IN RELATION TO MARKET VALUE

Senator KERREY. Thank you very much, Mr. Chairman.

Mr. Taylor, do you know the total retail value of the output of the plants that you inspect? Do you have economic information about value of product, number of people employed?

Mr. TAYLOR. The figure is in the range of \$175 billion. It is a large number.

Senator KERREY. So that we are talking about ballpark, let's say, \$100-plus billion of total economic value. You are asking for, then, \$500 million, roughly, to do the inspection work. And how much of that \$500 million comes from fees?

Mr. TAYLOR. Currently, we collect about \$75 million in reimbursement for overtime, second shift work, although it is, again, not done on an equitable basis, because we only collect for partial second shifts.

We have an anomaly in this system. We provide a free service for complete second shifts. So we collect a modest amount at this stage.

Senator KERREY. So we are looking at roughly \$425 million then in net general fund tax dollars in your budget. Is that fair, roughly?

Mr. TAYLOR. It comes out in the budget to \$488 million actually.

Senator KERREY. \$488 million net.

Mr. TAYLOR. Yes.

Senator KERREY. You are asking for—

Mr. TAYLOR. If we are able to get the increased amount of revenue from user fees.

Senator KERREY. So that your budget represents approximately 4 or 5 percent of the total market value of the product that is being inspected.

Mr. TAYLOR. I think the arithmetic would come out to be actually a smaller percent.

Senator KERREY. Well, then it would be \$4 billion if it was 4 percent. So you are looking at less than one-half of 1 percent of the total market value, just to put it in perspective.

Mr. TAYLOR. Yes; I think that would be an accurate perspective.

RATIONALE FOR FOOD SAFETY AND INSPECTION

Senator KERREY. And one can presume that in the absence of this inspection, that there would be, I think, a relatively small number, as is always the case when you have, let's say, 100 people that you are asking whether or not they are going to obey the speed limit, whether or not they are going to break any laws that we have, a relatively small number are going to break the law.

But a relatively small number could cause consumers to say, "We now wonder whether we are going to be able to get safe meat and poultry in any of our plants."

Is that basically the attitude that you all take when you are out examining?

I mean, I see you implementing the HACCP strategy, which I think is a first-rate strategy. I would like to ask some questions about how you are changing the culture of the inspectors.

I would personally, as Ms. Jensen noted, change the name of the inspectors to something more appropriate for the kind of individual that you are—the kind of work that those individuals are doing.

And I see you asking for the ability, with that in place, to allow the plants to be more flexible in their approach, since very often they will have microbiologists on staff, and they will make discoveries in the process of trying to figure out what the best way is to do things. They will make discoveries that may be better than what we have today.

So you are looking for a flexible environment, but you are still—the presumption is that if in, let's say, 1 plant out of 1,000 produces a pathogen that causes a significant illness in the country, that it would look bad for the entire industry and that we would suffer economic losses as a consequence.

I am just trying to establish the rationale for the effort and a relatively small percentage, in fact, it seems to me, measured against the overall market value of the product.

Mr. TAYLOR. I think it is a small percentage, and I think that the costs of our reform initiatives also are small in relation to the economic value. It is roughly two-tenths of 1 cent per pound of product produced to build in these science-based improvements.

I think what the public expects is that there is an entity setting appropriate food safety standards and then providing appropriate oversight to ensure that those standards are met.

Of course the industry has to be responsible for producing the safe product, but I think the public is looking for a standard-setting activity and an oversight activity.

When problems do arise, as they will, I think the public will have real difficulty maintaining confidence in the safety of these products and of the food supply in the absence of a credible standard-setting and credible oversight activity. And that, to me, is the core rationale for what we do and for the investment we make.

I think, also, there is a real significant public health payoff from this sort of standard setting and oversight.

We are going to step up the standard setting, and I think in turn we will see a real significant decrease in foodborne illness with benefits that include health, economics, and include a public confidence in the food supply.

HACCP—A SCIENCE-BASED SYSTEM

Senator KERREY. But to arrive at a point out there hopefully in the near future—I think your aggressive approach to setting the rules and getting the rules implemented in the higher risk areas is commendable.

But the goal is to have a science-based system, science-based HACCP system, in place. Talk to me a little bit about that.

We had a hearing last year on *E. coli* and the trim policy that was in place, that I frankly did not think was scientific-based, it provoked strong public response—I think Jay Leno called it “McFecal” that we were going to start serving up to the American consumers or something to that effect.

I mean, it seems to me that this strategy to put a science-based system in place is exactly what we ought to do. But how do we deal with the perception issue?

How are you prepared, and how do we need to stay prepared, to say to consumers, “Look, we are going to keep this science-based, and we are not going to allow ourselves to be scared into putting in place policies that might look good but might not in fact have scientific merit”?

Mr. TAYLOR. The power of HACCP—the acronym is meaningless to consumers, but I think the idea makes sense to consumers. Its power is that it requires every plant to have a plan and to take systematic measures to reduce risk to the extent it is reasonably possible to do that.

I think in a very direct way, as a result, it responds to the public expectation and I think it will address the public confidence concern because, again, I think people are more than smart enough to know that we are not going to have a zero-risk food supply.

We will still have foodborne illness regardless of the improvements we are making in building a system. But if we have a system that is fully capitalizing on the science that is available, that is systematically working to reduce risk, then I think the public can have confidence in that system and also, again, understand and accept the responsibility they still will have to do their part in the food handling and preparation stages.

But it is a matter of having a system that addresses the real hazards. The problem with the current system, and the reason I think there is public anxiety, particularly when problems occur, is that in slaughter plants, we do not address the most significant hazards in a direct way.

We do not have standards that hold slaughter facilities responsible for directly controlling and reducing harmful bacteria.

We do a lot of things in these plants, a lot of which contributes substantially to values people care about, but there is a gap in the system. We do not use science to directly control and reduce the harmful bacteria.

I think by putting those systems in place, we will make the food safer, and we will build public confidence.

STEAM VACUUMING TECHNOLOGY

Senator KERREY. Well, let me just use a current example that you are trying to work your way through. I presume you are close or perhaps already have.

Did you announce the protocol that you are going to allow for steam vac? Is that in place now? Have they started doing it?

Mr. TAYLOR. We issued the approval to begin those commercial trials on Friday. As soon as the company can get the equipment up and running, it is in their hands, really. So it should be very soon.

Senator KERREY. How will you proceed with the evaluation of that? For example, will you evaluate it? And apropos of your statement that you are going to be flexible, do you plan to adjust the protocol as evidence accumulates?

Mr. TAYLOR. Sure. In a way that I hope shows our commitment to reaching out and working closely on technologies that can improve food safety and based on some experimental evidence, we have said that this steam vacuuming technology under certain conditions can be at least as effective as trimming to remove certain fecal contamination. Based on that experimental data, we have said that we are ready to have this technology fully tested in commercial trials.

We envision that it will be used on a relatively large scale in a trial setting to collect real in-plant operational data to verify whether, under actual in-plant conditions and over a period of time, this technology is, in fact, living up to the promise that it has shown in the experimental work.

We have worked very closely with the interested companies in developing the test protocol. We will be monitoring the study as it goes on, evaluating the data continuously, and will be ready at such time as the trials are complete to make a science-based decision about that technology.

We have taken a very affirmative approach where we have seen, as in this case, an opportunity to improve food safety with the new technology, to get it out there and thoroughly test it in a commercial setting.

ROLE OF THE INSPECTOR

Senator KERREY. Well, I appreciate that a lot.

Can you tell me what your view is of the inspector role? I have said in previous hearings and discussions that I have had, first with Ms. Jensen and with you as well, I think the title and the job description of an inspector is at odds with what you have just described.

I mean, you just described your vision for a relationship between the regulator and the plant as one where science is going to be used, technology is going to be used, flexibility is going to be granted once the HACCP is firmly in place.

That seems at odd with the old model that we have had for years, which is you go out and you take your checkboard and you, unannounced or announced, visit the plant.

You walk through and you add up the numbers, and if you get up to a certain number, action is taken. It is much more of a puni-

tive and a rigid system than the one that, it seems to me, you have just described.

Mr. TAYLOR. What we are talking about is not abandoning inspection but modifying, transforming inspection and modernizing it.

I personally believe that inspection is an important question, whether you call the inspectors "inspectors" or "food safety officers" or "food technologists."

There is a need for, even in a HACCP environment, focusing much more on whether there are systems in place to prevent hazards and "Are those systems working effectively?"

There is still a need for objective oversight inspection, if you will, to verify that those systems are working and that the product is meeting an appropriate standard, and standards that are more sophisticated in terms of including microbiological criteria.

So the skills that we will be using in our inspectional role will have to expand and I think will be, in the end, more objective and less subject to the sort of dispute that I know is inherent in the current system.

Senator KERREY. To be clear—I need to surrender back my time to the chairman, but to be clear, I support severe penalties on plants that are risking public health.

Tell me what you want to do and I will support it, about plants out there putting the public at risk.

What I do think is needed is a new job description for inspectors, given your own vision for what you are asking them to do.

And perhaps we need to challenge the States. Particularly if you are doing the epidemiological efforts, as you are describing, we may need to challenge the States to become more active partners, particularly on the public health side.

I yield back to you, Mr. Chairman.

Senator COCHRAN. Thank you very much, Senator Kerrey.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE
STATEMENT OF LONNIE J. KING, ACTING ADMINISTRATOR

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION
STATEMENT OF JAMES R. BAKER, ADMINISTRATOR

AGRICULTURAL MARKETING SERVICE
STATEMENT OF LON HATAMIYA, ADMINISTRATOR

INTRODUCTION OF WITNESS

Senator COCHRAN. Ms. Jensen, we appreciate you being here.

Patricia Jensen is Acting Assistant Secretary for Marketing and Regulatory Programs at the Department of Agriculture.

Let me invite you now to make any comments or summary statements about the budget request for those activities under your jurisdiction that you would like to make.

STATEMENT OF PATRICIA JENSEN

Ms. JENSEN. Thank you, Mr. Chairman, members of the subcommittee.

I am pleased to be before you to discuss the activities of the Marketing and Regulatory Programs of the U.S. Department of Agriculture and to discuss their fiscal year 1996 budget proposals.

With me are Dr. Lonnie King, Acting Administrator of APHIS, Mr. James Baker, at the end here, Administrator of GIPSA, and Mr. Lon Hatamiya, Administrator of AMS. And they all have written statements that I would like to have—

Senator COCHRAN. They will all be included in the record, and we appreciate having them. Thank you.

Ms. JENSEN. Thank you. And I also have one, Mr. Chairman.

Senator COCHRAN. It is a part of the record now.

Ms. JENSEN. Thank you.

The mission of the Marketing and Regulatory Programs is to facilitate the domestic and international marketing of U.S. agricultural products and to ensure the health and care of animals and plants.

These activities improve market competitiveness and the economy for the overall benefit of both consumers and American agriculture.

For 1996, we are requesting a current law appropriation of \$518.3 million. This request is \$3.6 million more than the current estimate for 1995, and we will submit legislation in the near future to authorize the recovery of \$28.6 million in license and user fees.

In addition, the budget requests appropriation language to allow \$100.3 million in the Agricultural Quarantine Inspection [AQI] Program. That activity is already funded by user fees that we want to

be made available to program managers without further appropriation.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

I would like to start with the Animal and Plant Health Inspection Service. APHIS protects American agriculture by preventing the introduction of destructive foreign plant and animal pests and diseases by monitoring and disseminating information regarding plant and animal pests and diseases, by conducting programs to prevent, detect, and eradicate harmful pests and diseases, and by developing methods to control animals and pests which threaten agriculture or constitute a public health or safety hazard.

It also administers the Animal Welfare Act to ensure that warm-blooded animals used for research, exhibition, or sold wholesale as pets receive humane care and treatment.

Some of the program accomplishments and plans for APHIS: Pest and disease exclusion is the primary focus of the AQI Program. Inspectors operate at ports of entry to protect American agriculture from the introduction of exotic plant pests and animal disease.

Nearly 62 million passengers at U.S. airports and other ports of entry were inspected and precleared in 1994, an increase of almost 5 million from 1993. Cargo inspections also increased by over 81,000.

While the domestic operations between Puerto Rico, Hawaii, and travelers at the Canadian and Mexican borders are financed through appropriated funds, nearly 80 percent of the total inspection activities were financed by user fees to international travelers and cargo transit operators.

APHIS negotiates plant pest and animal disease protocols that facilitate international trade. In 1994, APHIS issued 271,000 phytosanitary certificates which facilitated the export of \$23 billion in plants and plant products.

APHIS assisted the Department and the U.S. trade representative in resolving commodity disputes with foreign governments over sanitary and phytosanitary issues.

In one case, sales of \$120 million in apples and other fruit were preserved through negotiations with Taiwan and China. In another case, APHIS assisted the Haitian Government with phytosanitary requirements to export mangoes to the United States.

Haitian mango exports were the first product that the country began trading since the restoration of democracy in that country.

The import/export inspection program provides regulatory oversight over the importing and exporting of approximately 67 billion dollars' worth of agricultural products.

APHIS expanded trade opportunities by incorporating scientifically defensible risk analysis and regionalization principles into its import requirements, also worked with industry and foreign animal health officials to augment livestock and poultry exports.

Plant pest management control methods have become more sensitive to environmental concerns. Parasites for such pests as the Russian wheat aphid and sweetpotato whitefly are being developed through improved foreign collection, quarantine screening, mass rearing, and evaluation of exotic enemies.

In 1994, we shifted to a 2-year areawide eradication strategy for fruit fly infestations in the Los Angeles area.

Important features of the disease and pest control programs include the cooperative partnerships with producers, accredited veterinarians, allied industry representatives and State agricultural health officials. For example, the boll weevil program has APHIS paying 30 percent of program costs with cooperators paying 70 percent.

In 1994, APHIS investigated and resolved 642 complaints and conducted nearly 13,500 compliance and other inspections to ensure the proper care of animals under the Animal Welfare Act.

The animal damage control program strives to alleviate the damage caused by wildlife and emphasizes nonlethal methods through an integrated pest management approach.

We are requesting a current law appropriation of \$430.3 million for salaries and expenses for 1996. That is a reduction of \$6.8 million from the 1995 current estimate.

We propose language which would enable \$100.3 million of user fees collected at the AQI ports of entry to remain available for providing services that are driven by demand.

We are confident that the industry oversight of the user fees provides sufficient incentive for the program managers to operate a low-cost inspection program.

A legislative proposal will be submitted to provide authority for collecting \$8.2 million of user fees for selected activities in biotechnology, veterinary biologics, and animal welfare.

These fees will recover the cost of issuing permits and notifications to test biotechnology products, regulating the sale, manufacture, and distribution of veterinary biologic products in the United States and licensing dealers and other handlers of animals.

For construction of buildings and facilities, the request includes \$2 million to complete the outdoor holding pens at the Denver Wildlife Research Center in Fort Collins, CO, and \$3.5 million for modernization costs at the Plum Island Animal Disease Center in Plum Island, NY, to complement the Agricultural Research Service budget request for these costs.

The budget requests a contingency fund of \$20 million, an increase of \$15.1 million above the 1995 current estimate for controlling outbreaks of insects, plant diseases, animal diseases and for the control of pests, animals, and birds to meet emergency conditions.

Increasing the contingency fund is expected to reduce the need for transfers of Commodity Credit Corporation funds for emergency operations.

The budget also proposes to streamline and simplify the survey and plant pest management activities of several plant pest program line items.

These consolidated activities would provide early detection of exotic plant pests to prevent sustained infestations and facilitate flexible program management which will result in administrative cost savings.

AGRICULTURAL MARKETING SERVICE

The fundamental mission of AMS is to facilitate the strategic marketing of agricultural products to ensure fair trading practices and to promote a competitive and efficient marketplace.

The AMS programs enable the private sector marketing system to provide food and other agricultural products more efficiently, with greater dependability, lower economic cost and higher equitable treatment among the participants.

The agency's activities include the dissemination of market information, development of grade standards, protection of producers from unfair market practices, random testing of commodities for pesticide residues, oversight of industry-funded programs to promote agricultural products and research and technical assistance aimed at improving efficiency of food marketing and distribution.

AMS also administers marketing agreements and orders at the national level and purchases commodities that support domestic feed programs. AMS changes its programs to meet the needs of the international marketplace.

The market news program now provides timely information on fruit and vegetable markets in Canada, Mexico, England, Germany, France, Poland, and the Netherlands. Weekly reports are provided for livestock traded in Japanese, New Zealand, and Australian markets.

The Pesticide Data Program works closely with the EPA and the Food and Drug Administration to provide statistically reliable information on pesticide concentrations in selected fresh fruits and vegetables and grain products.

State employees collected 8,400 samples on which they performed 40,000 analyses targeted at 42 of the 47 pesticides on the EPA's priority list. These analyses were conducted by state-of-the-art techniques and showed generally very low levels of pesticide residues.

The National Organics Standards Board is helping AMS establish the organic certification program in order to begin operation in 1996.

AMS-accredited State officials or private individuals will certify farms and products as organic, and user fees will be charged for these services. And the information will assure consumers that products labeled as organically grown meet the organic standards.

For 1996, the AMS budget requests a current law appropriation of \$50.6 million for our marketing services programs and \$1.2 million for the Federal-State Marketing Improvement Program.

The Marketing Services Program has four programmatic increases. The first proposal requests an additional \$556,000 to further implement the organic certification program. The organic industry itself is valued at \$1.5 billion and is growing at a rate of 20 percent per year.

Current funding to implement the organic certification title of the Food, Agriculture and Trade Act of 1990 is not adequate to expedite development, to ensure labeling integrity, or to facilitate global trade in such products.

This budget requests an increase of \$351,000 to fulfill the temperature requirements of the Egg Products Inspection Act. AMS will verify compliance as part of its shell egg surveillance functions.

We request an additional \$2.7 million for pesticide recordkeeping in order to assure adequate monitoring of the recordkeeping in 22 States that are not already monitoring the records of certified applicators.

And the last programmatic increase involves a \$1.1 million commitment to achieve a diversified work force. It would fully establish a center of excellence in world food distribution training at Prairie View University in Texas.

Legislation will be proposed to reduce the level of appropriated funding by \$3.9 million through retention of the user fees collected for the development of commodity standards.

Legislation will also be proposed to recover the \$10.5 million cost of Federal oversight of marketing agreements and orders through increased assessments to those producers and handlers who benefit from the marketing agreements and orders.

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION

And finally, the Grain Inspection, Packers and Stockyards Administration, which we now call GIPSA. It was established on October 20, 1994, under the authority of the Department's Reorganization Act, to administer programs and functions of the former Federal Grain Inspection Service and Packers and Stockyards Administration.

The agency programs and services promote a competitive, efficient market structure and facilitate the marketing of grains, oilseeds, rice, livestock, meat, and poultry in domestic and international markets.

The agency establishes official U.S. standards for grain, official weighing and grain inspection activities, and inspection of rice, dried beans and peas, processed grain products, and hops.

The agency also provides assurance for the financial integrity of the livestock, meat, and poultry markets. The agency monitors competition in order to protect producers, consumers, and industry from deceptive and fraudulent business practices which affect meat and poultry prices.

In 1994, GIPSA collected \$33.3 million for official grain inspection and weighing services. The official services are mandatory for the \$13.5 billion of exports of wheat, corn, coarse grains, rice, and soybeans and costs the industry \$20.7 million.

In 1994, the program performed nearly 2.5 million official inspections, 700,000 protein oil tests, 100,000 mycotoxins tests, and a variety of other services, including the weighing of over 221,000 shipments of grain.

GIPSA is working to maintain worldwide confidence in the quality and the value of U.S. grain exports. On February 11, 1995, GIPSA implemented a prohibition on adding water to grain.

The prohibition is in response to domestic and international customers' concerns that water is often applied, not to suppress dust for safety and air quality purposes, but to increase the weight of grain and thereby gain a market advantage.

GIPSA also provided financial integrity to the packers and stockyards industry, which had a wholesale value of livestock, meat, and poultry products valued at approximately \$90 billion in 1994.

Senator COCHRAN. Ms. Jensen, I hate to interrupt you, but we have a vote on the floor, and the second bells have rung. We have to go over and record our vote on the floor.

I am going to ask that you suspend your statement at this point. We will go vote and return.

Ms. JENSEN. Certainly.

Senator COCHRAN. The subcommittee stands in recess for that purpose.

[A brief recess was taken.]

Senator COCHRAN. The subcommittee will come to order.

I apologize for the interruption.

Ms. Jensen, I know you have a couple more pages of your statement. I encourage you to summarize it, if you will, and let me have a chance to ask a question at least of this hearing panel.

Ms. JENSEN. Thank you, Mr. Chairman. I certainly will do that. I just would like to ask you that the rest of my statement be entered in the record.

PREPARED STATEMENTS

Senator COCHRAN. Thank you very much. Your complete statement and the statements of Dr. King, Mr. Hatamiya, and Mr. Baker will be made part of the record.

[The statements follow:]

PREPARED STATEMENT OF PATRICIA JENSEN

Mr. Chairman and members of the Committee, I am pleased to appear before you to discuss the activities of the Marketing and Regulatory Programs of the U.S. Department of Agriculture and their fiscal year 1996 budget proposals. Since I appeared before this Committee last year, the focus of many agencies and mission areas has shifted. The recently approved USDA reorganization changed our name from Marketing and Inspection Services to Marketing and Regulatory Programs. The significance of this name change is that all of the "food safety" functions have been transferred to the newly established Under Secretary for Food Safety. This includes the Food Safety and Inspection Service, the egg products inspection activities that were previously performed by the Agricultural Marketing Service (AMS) and the pre-harvest pathogen reduction and the Salmonella enteritidis programs that were previously administered by the Animal and Plant Health Inspection Service (APHIS). The reorganization also merged the Federal Grain Inspection Service with the Packers and Stockyards Administration to form the Grain Inspection, Packers and Stockyards Administration (GIPSA). We have also streamlined the administrative functions across the mission area and consolidated field offices to produce staffing and administrative cost savings.

With me today are Dr. Lonnie J. King, Acting Administrator of APHIS, Mr. Lon Hatamiya, Administrator of AMS, and Mr. James Baker, Administrator of GIPSA.

They have prepared statements for the record and will answer questions regarding the budget proposals for their specific programs.

MARKETING AND REGULATORY PROGRAMS

The mission of the Marketing and Regulatory Programs is to facilitate the domestic and international marketing of U.S. agricultural products and to ensure the health and care of animals and plants. These activities improve market competitiveness and the economy for the overall benefit of both consumers and American agriculture.

Fiscal Year 1996 Budget

For 1996, we are requesting a current law appropriation of \$518.3 million. This request is \$3.6 million more than the current estimate for 1995. We will submit leg-

isolation in the near future to authorize the recovery of \$28.6 million in license and user fees. In addition, the budget requests appropriation language to allow \$100.3 million of Agricultural Quarantine Inspection (AQI) program activity already funded by user fees be made available to program managers without further appropriation. I will use the remainder of my time to highlight the Department's budget requests for the Marketing and Regulatory Programs.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

APHIS protects American agriculture by preventing the introduction of destructive foreign plant and animal pests and diseases; by monitoring and disseminating information regarding plant and animal pests and diseases; by conducting programs to prevent, detect, and eradicate harmful pests and diseases; and by developing methods to control animals and pests which threaten agriculture or constitute a public health or safety hazard. It also administers the Animal Welfare Act to ensure that warm blooded animals used for research, exhibition, or sold wholesale as pets receive humane care and treatment.

Program Accomplishments and Plans

Pest and disease exclusion is the primary focus of the AQI program. Inspectors operate at ports of entry to protect American agriculture from the introduction of exotic plant pests and animal diseases. Nearly 62 million passengers at U.S. airports and other ports of entry were inspected and pre-cleared in 1994, an increase of almost 5 million from 1993. Cargo inspections also increased by over 81,000. While the domestic operations between Puerto Rico, Hawaii and travelers at the Canadian and Mexican borders are financed through appropriated funds, nearly 80 percent of the total inspection activities were financed by user fees to international travelers and cargo transit operators.

APHIS negotiates plant pest and animal disease protocols that facilitate international trade. In 1994, APHIS issued 271,000 phytosanitary certificates which facilitated the export of \$23 billion in plants and plant products. APHIS assisted the Department and the U.S. Trade Representative in resolving commodity disputes with foreign governments over sanitary and phytosanitary issues. In one case, sales of \$120 million in apples and other fruit were preserved through negotiations with Taiwan and China. In another case, APHIS assisted the Haitian government with phytosanitary requirements to export mangoes to the U.S. Haitian mango exports were the first product that the country began trading since the restoration of Democracy. APHIS also provided on-site inspection of returning troops and equipment which included training of military customs inspectors. The major pest exclusion activities in Haiti were for plant pests such as fruit flies and animal diseases, including Anthrax.

The import/export inspection program provides regulatory oversight over the importing and exporting of approximately \$67 billion worth of agricultural products. APHIS expanded trade opportunities by incorporating scientifically defensible risk analysis and regionalization principles into its import requirements, and also worked with industry and foreign animal health officials to augment livestock and poultry exports. Because of these efforts, U.S. livestock exports increased an estimated 30 percent during fiscal year 1994 and poultry exports also rose significantly. Fulfilling its import/export mission, APHIS provided permits for 4 million head of livestock, 100 million poultry, birds, and hatching eggs, 7.6 million doses of semen, and 13,000 embryos.

Plant pest management control methods have become more sensitive to environmental concerns. Parasites for such pests as the Russian Wheat Aphid and Sweetpotato Whitefly are being developed through improved foreign collection, quarantine screening, mass rearing, and evaluation of exotic enemies. In 1994, we shifted to a 2-year area-wide eradication strategy for the fruit fly infestations in Los Angeles County. This effort relies on the weekly release of large numbers of sterile flies, localized chemical applications as necessary, and significant educational efforts to prevent new introductions of fruit flies. We expect to completely eradicate this infestation in 1995.

Important features of the disease and pest control programs include the cooperative partnerships with producers, accredited veterinarians, allied industry representatives, and State agricultural health officials. For example, the boll weevil program has APHIS paying 30 percent of program costs and cooperators paying 70 percent. This program continues its steady progress, with producers in more States showing an interest in developing cooperative boll weevil eradication programs. Another example is the Brucellosis Eradication program, which is nearing completion. On March 28, 1994, Texas was upgraded to Class "A" status. Only 18 states remain to be declared "brucellosis free."

In 1994, APHIS investigated and resolved 642 complaints and conducted nearly 13,500 compliance and other inspections to ensure the proper care of animals under the Animal Welfare Act. We monitor the horse show industry in order to eliminate the soring of horses and have incorporated the use of infrared thermography in the horse protection program. The Animal Damage Control program strives to alleviate the damage caused by wildlife and emphasizes non-lethal methods through an integrated pest management approach.

APHIS Funding

We are requesting a current law appropriation of \$430.3 million for salaries and expenses for 1996, a reduction of \$6.8 million from the 1995 current estimate. We propose language which would enable the \$100.3 million of user fees collected at the AQL ports of entry to remain available for providing services that are driven by demand. We are confident that the industry oversight of the user fees provides sufficient incentive for the program managers to operate a low cost inspection program. A legislative proposal will be submitted to provide authority for collecting \$8.2 million of user fees for selected activities in biotechnology, veterinary biologics, and animal welfare. These fees will recover the cost of issuing permits and notifications to test biotechnology products; regulating the sale, manufacture, and distribution of veterinary biological products in the U.S., and licensing dealers and other handlers of animals. For construction of buildings and facilities, the request includes \$2 million to complete the outdoor holding pens at the Denver Wildlife Research Center in Fort Collins, Colorado; and \$3.5 million for modernization costs at the Plum Island Animal Disease Center in Plum Island, New York, to complement the Agricultural Research Service budget request for these costs.

The budget requests a contingency fund of \$20 million, an increase of \$15.1 million above the 1995 current estimate for controlling outbreaks of insects, plant diseases, animal diseases and for the control of pest animals and birds to meet emergency conditions. Increasing the contingency fund is expected to reduce the need for transfers of Commodity Credit Corporation funds for emergency operations.

The budget also proposes to streamline and simplify the survey and plant pest management activities of several plant pest program line items. These consolidated activities would provide early detection of exotic plant pests to prevent sustained infestations and facilitate flexible program management which will result in administrative cost savings.

AGRICULTURAL MARKETING SERVICE

The fundamental mission of AMS is to facilitate the strategic marketing of agricultural products, ensure fair trading practices, and promote a competitive and efficient marketplace. The AMS programs enable the private sector marketing system to provide food and other agricultural products more efficiently, with greater dependability, lower economic cost, and higher equitable treatment among the participants. The agency's activities include the dissemination of market information, development of grade standards, protection of producers from unfair marketing practices, random testing of commodities for pesticide residues, oversight of industry funded programs to promote agricultural products, and research and technical assistance aimed at improving efficiency of food marketing and distribution. AMS also administers marketing agreements and orders at the national level and purchases commodities that support domestic feeding programs, such as the National School Lunch program.

Program Accomplishments and Plans

AMS changes its programs to meet the needs of the international marketplace. The market news program now provides timely information on fruit and vegetable markets in Canada, Mexico, England, Germany, France, Poland and the Netherlands. Weekly reports are provided for livestock traded in Japanese, New Zealand, and Australian markets. Price, volume and product quality information enables buyers and sellers to have a competitive edge in evaluating market conditions and developing international marketing strategies.

These market information systems are being extended through the technical assistance efforts of the Foreign Agricultural Service's Emerging Democracies program to Bulgaria, Kazakhstan, Poland, and Russia. AMS recommendations would remove institutional and operational barriers to U. S. exports. Since the passage of NAFTA, AMS has handled numerous requests from U.S. exporters for assistance in overcoming logistical barriers to trade.

The Pesticide Data program works closely with the Environmental Protection Agency and the Food and Drug Administration to provide statistically reliable information on pesticide concentrations in selected fresh fruits and vegetables and grain

products. State employees collected 8,400 samples on which they performed 40,000 analyses targeted at 42 of the 47 pesticides on the EPA's priority list. The analyses were conducted by state-of-the-art techniques and show generally, very low levels of pesticide residues. This high quality, statistically reliable information gives me confidence in concluding that the food supply is safe.

The National Organics Standards Board is helping AMS establish the organic certification program in order to begin operation in 1996. AMS-accredited state officials or private individuals will certify farms and products as organic. User fees will be charged for these services and the information will assure consumers that products labeled as organically grown meet the organic standards.

AMS Funding

For 1996, the budget requests a current law appropriation of \$50.6 million for our Marketing Services programs and \$1.2 million for the Federal-State Marketing Improvement program.

The Marketing Services program has four programmatic increases. The first proposal requests an additional \$556 thousand to further implement the organic certification program. The organic industry is valued at \$1.5 billion, and is growing at a rate of 20 percent per year. Current funding to implement the organic certification title of the Food, Agriculture and Trade Act of 1990 is not adequate to expedite development, ensure labeling integrity, or to facilitate global trade in such products. This budget requests an increase of \$351 thousand to fulfill the temperature requirements of the Egg Products Inspection Act. AMS will verify compliance as part of its shell egg surveillance functions. We request an additional \$2.7 million for pesticide recordkeeping in order to assure adequate monitoring of the recordkeeping in the 22 states that are not already monitoring the records of certified applicators. The last programmatic increase involves a \$1.1 million commitment to achieve a diversified work force. It would fully establish a Center of Excellence in World Food Distribution Training at Prairie View University in Texas. This effort is supported by the Economic Research Service, Food and Consumer Service, Foreign Agricultural Service, and the Consolidated Farm Service agency. The program is expected to greatly enhance minority representation with unique qualifications to assist in the delivery of USDA programs and provide support to the private sector.

Legislation will be proposed to reduce the level of appropriated funding by \$3.9 million through retention of the user fees collected for the development of commodity standards. Legislation will also be proposed to recover the \$10.5 million cost of Federal oversight of marketing agreements and orders through increased assessments to those producers and handlers who benefit from marketing agreements and orders.

GRAIN INSPECTION, PACKERS AND STOCKYARDS ADMINISTRATION

GIPSA was established on October 20, 1994, under the authority of the Department's Reorganization Act of 1994, to administer programs and functions of the former Federal Grain Inspection Service and Packers and Stockyards Administration. The Agency programs and services promote a competitive, efficient market structure and facilitate the marketing of grains, oilseeds, rice, livestock, meat, and poultry in domestic and international markets. The Agency establishes official U.S. standards for grain, official weighing and grain inspection activities, and inspection of rice, dry beans and peas, processed grain products, and hops. The Agency also provides assurance for the financial integrity of the livestock, meat, and poultry markets. The Agency monitors competition in order to protect producers, consumers, and industry from deceptive and fraudulent business practices which affect meat and poultry prices.

Program Accomplishments and Plans

In 1994, GIPSA collected \$33.3 million for official grain inspection and weighing services. The official services are mandatory for the \$13.5 billion of exports of wheat, corn, coarse grains, rice and soybeans and cost the industry \$20.7 million. The fee represented about 0.15 percent of the total value of these exports. In 1994, the program performed nearly 2.5 million official inspections; 700,000 protein oil tests; 100,000 mycotoxin tests; and a variety of other services including the weighing over 221,000 shipments of grain.

GIPSA is working to maintain worldwide confidence in the quality and value of U.S. grain exports. On February 11, 1995, GIPSA implemented a prohibition on adding water to grain. The prohibition responds to domestic and international customers' concerns that water is often applied, not to suppress dust for safety and air quality purposes, but to increase the weight of grain and thereby gain a market advantage.

GIPSA also provided financial integrity to the Packers and Stockyards (P&S) industry which had a wholesale value of livestock, meat, and poultry products valued at approximately \$90 billion in 1994. GIPSA monitored 1,404 stockyards; 7,308 market agencies/dealers; and 2,215 registered packer buyers who are engaged in the livestock marketing business. Another 6,900 meat distributors, brokers, and dealers, and an estimated 250 poultry firms are subject to the P&S Act.

The statutory trust provisions of P&S have been very successful in recovering losses as a result of failures by meat packers and live poultry dealers. During 1994, livestock producers were paid \$2 million by 11 packers under the statutory trust provisions administered by GIPSA. Over the past 5 years, more than \$14.4 million has been received by livestock producers under the statutory trust provisions. During 1994, poultry producers were paid \$1 million by four poultry processors under the statutory trust provisions. Since the P&S Act was amended in 1987, poultry producers have received over \$6.1 million under the poultry trust provisions.

The study of concentration in the red meat packing industry, begun in fiscal year 1992, is continuing. The study will foster greater understanding of concentration and structural change in the livestock and meat industries, and assist in enforcement activities. A summary report will be completed during the summer of 1995 to cover six of the seven projects and a final summary report will be prepared by the end of 1995.

GIPSA initiated a surveillance program to review the handling practices, services, and facilities at stockyards to ensure that livestock are handled and cared for properly. The reviews found the majority of stockyards use good care and handling practices, however, problems were identified at some stockyards. Of the 1,415 markets visited, 81 downed animals were observed at 66 markets. As a result of the reviews, GIPSA issued administrative complaints against two stockyards for alleged unreasonable handling of downed animals, and issued warning letters to seven markets for failure to provide proper care and handling of downed animals.

GIPSA Funding

We are requesting a current law appropriation of \$23.7 million for fiscal year 1996. The total program level for grain inspection of \$53.8 million consists of \$11 million being appropriated for compliance, standardization, and methods development activities; and \$42.8 million for fees to inspect and weigh grain. The fiscal year 1996 budget proposes legislation to authorize the collection of \$3.6 million in new user fees to cover the costs of grain standardization activities.

For P&S Programs, the budget proposes an increase of \$600,000 to strengthen poultry compliance activities. The increased funding would allow GIPSA to conduct more inspections to prevent unfair, deceptive, or discriminatory business practices by poultry dealers. We will be proposing legislation to authorize the collection of license fees to administer all activities under the P&S Act. All meat packers, live poultry dealers, stockyard owners, market agencies, and dealers, as defined in the P&S Act, would be subject to the license fees. We will also be proposing legislation to authorize a dealer trust, similar to the packer trust, which will require livestock inventories and accounts receivable from the sale of livestock to be held in trust for unpaid cash sellers when a dealer fails to pay for livestock.

CONCLUSION

Thank you for this opportunity to present the budget for these Marketing and Regulatory Programs. We have streamlined program operations, are responsive to customer service needs and fully evaluate the benefits and costs of our regulatory activities. We believe the budget proposes funding amounts and sources that will assure the successful accomplishment of the Department of Agriculture's mission to serve the industry, consumers, and the general public.

PREPARED STATEMENT OF DR. LONNIE J. KING

Mr. Chairman and members of the Committee, I appreciate the opportunity to report on our continuing efforts to facilitate the domestic and international marketing of U.S. agricultural products and to ensure the health and care of animals and plants, while improving market competitiveness and the economy for the overall benefit of both consumers and American agriculture. I would like to report briefly on our Agency's mission, organization, current activities, and initiatives.

First, let me introduce some members of our management team with me today. They are Mr. Terry L. Medley, Acting Associate Administrator; and our Deputy Administrators, Mr. Bobby R. Acord for Animal Damage Control; Dr. Dale F. Schwindaman for Regulatory Enforcement and Animal Care; Dr. Alex B. Thiermann

for International Services; Mr. Alfred S. Elder, Acting Deputy Administrator for Plant Protection and Quarantine; Dr. John H. Payne, Acting Director of Biotechnology, Biologics, and Environmental Protection; Dr. Donald W. Luchsinger, Acting Deputy Administrator for Veterinary Services; and Mr. Kevin Shea, Director of the Budget and Accounting Division.

AGENCY MISSION

The mission of the Animal and Plant Health Inspection Service (APHIS) is to protect American agriculture by providing leadership in ensuring the health and care of animals and plants, protecting the U.S. food supply, and thus improving agricultural productivity and competitiveness. This primary objective helps to keep food safe, plentiful, and affordable. Our programs help keep our agricultural industry efficient, scientifically-based, economically sound, and successful, thereby contributing to our national economy and the public health. APHIS accomplishes this mission by: excluding exotic agricultural pests and diseases; detecting and monitoring incursions of agricultural pests and diseases; managing and controlling endemic agricultural pests, diseases, and damaging wildlife species; providing scientific and technical services; facilitating agricultural exports; protecting the welfare of animals; protecting endangered species and our environment; and collecting, analyzing, and disseminating information.

CURRENT ACTIVITIES AND INITIATIVES

To achieve our mission, all of our activities must be channeled toward maintaining the favorable health status of our national food animal populations and plant commodities. This objective means that our programs reduce, and in many cases, eliminate plant pests and animal diseases. This objective is key to making American agricultural products viable—economical for producers, safe and affordable for food consumers, and competitive for international trade and commerce. We accomplish our mission by performing five major functions:

Pest and Disease Exclusion.—APHIS carries out inspections at U.S. ports-of-entry to prevent the introduction of foreign plant and animal pests and diseases which are harmful to our country's agriculture, and facilitates the entry of American agricultural products into international markets. International passenger inspections increased from 57 million in fiscal year 1993 to 62 million in fiscal year 1994. During the same period, cargo inspections increased by over 81,000. APHIS continued to use specially trained dogs to detect prohibited items at international airports. APHIS maintained 47 detector dog teams located at 19 major airports and post offices in the United States. The Agency plans to expand the program to 60 teams by fiscal year 1996 and to 108 teams by fiscal year 2000. We continue to expand the use of X-ray technology to screen passenger baggage for clearance. Currently, the Agency uses 76 X-ray machines at major airports and land border stations. In this area of agricultural quarantine inspection, APHIS initiated a pilot project, in accordance with the Government Performance and Results Act, to monitor the effectiveness of preventing pests from entering the country; data collection activities now being conducted at four ports of entry will eventually be expanded to provide an accurate estimate of pest introductions nationwide.

The Agency facilitates the exportation of U.S. agricultural products by addressing sanitary and phytosanitary barriers affecting the exportation of specific products or by certifying that the product meets the sanitary/phytosanitary requirements of an importing country. The Agency serves as the focal point for maintaining and enhancing the Nation's ability to export plants and plant products throughout the world. In fiscal year 1994, 271,000 phytosanitary certificates were issued facilitating the export of \$23 billion in plants and plant products. Representatives of various industry groups have estimated the added value of market access achieved in fiscal year 1994 because of APHIS leadership to be between \$211 and \$239 million. Additionally, the Agency was able to retain threatened markets worth \$120 million. The increase in the combined total market access value for this year alone is estimated at between \$331 and \$359 million.

The import/export inspection program provides regulatory oversight over the importing and exporting of approximately \$67.1 billion worth of agricultural products. APHIS protects U.S. livestock, poultry, and wildlife populations from exposure to exotic diseases, and expanded markets abroad by assuring that exported animals and animal products meet the health requirements of recipient countries. APHIS expanded trade opportunities by incorporating scientifically defensible risk analysis and regionalization principles into its import requirements, and worked with industry and foreign animal health officials to augment livestock and poultry exports. Through these efforts, U.S. livestock exports increased an estimated 30 percent dur-

ing fiscal year 1994; poultry exports also rose significantly. Fulfilling this mission required regulatory oversight on importing of approximately 3 million animals, 16 million poultry, birds, and hatching eggs, 600,000 doses of semen, 5,336 embryos, and 7,000 product import permits. The program issued point-of-origin certificates for the export of approximately 1 million head of livestock, 55 million live poultry, 32 million hatching eggs, 7 million doses of semen, and 7,000 embryos. The workload associated with certifying and supporting U.S. exports, as opposed to the Agency's traditional pest and disease exclusion activities, has increased dramatically in recent years. We spend our time assisting U.S. agricultural export groups understand and overcome sanitary and phytosanitary barriers. We are implementing new trade rules, including new disciplines to control the use of sanitary and phytosanitary requirements affecting trade as a result of NAFTA and the GATT Uruguay Round Agreement. For example, APHIS assisted the Department and the U.S. Trade Representative in resolving commodity disputes with foreign governments over sanitary and phytosanitary issues. In this case, sales of \$120 million in apples and other fruit were preserved through negotiations with Taiwan and China. The Department committed to increasing U.S. agricultural exports by 50 percent by the year 2008. As exports increase, APHIS will play a vital part in negotiating with foreign governments on inspection and certification requirements for U.S. products and helping industry challenge unfair technical trade measures which may unjustifiably impede U.S. exports.

APHIS cooperated with the California Department of Food and Agriculture on the Mediterranean fruit fly eradication project located in the Los Angeles basin in fiscal year 1994. Part of the cooperative effort includes shipping sterile Medflies each week from APHIS' rearing facilities in Mexico and Guatemala. We are also working with Mexican officials in addressing emerging Medfly outbreaks in that country. For screwworm, we are examining options, including a privatization effort, for building a new screwworm sterile fly production plant in Panama. We are continuing efforts to eradicate screwworms from Mexico and Central America and will establish a sterile fly barrier in Panama, which is the only guarantee against reintroduction into the United States. The program continues to be successful and has a target completion date of 1998. APHIS conducts cooperative foot and mouth disease eradication activities in Colombia and participates in prevention and detection work in Mexico, Central America, and Panama.

Plant and Animal Health Monitoring.—APHIS monitors animal and plant health through cooperative efforts involving the Federal and State governments, and industry. These programs enable APHIS to maintain the health of agricultural plants and animals by rapidly detecting and reacting to exotic pests and disease introductions. With the globalization of agriculture, we are serving many multinational corporations that depend on new export possibilities for future growth. It is estimated that for every \$1 billion increase in exports, approximately 25,000 new jobs are created. The health status of our agricultural producers' plants and animals will be internationally scrutinized and will form the basis of our competitive market niche.

In recent years, APHIS has placed increased emphasis on preventing disease and pest infestations and monitoring the overall health status of our animal and plant resources. We are moving toward a stronger functional and process orientation which gives us greater flexibility to detect, diagnose, conduct traceback, and facilitate on-farm activities related to all aspects of agricultural health and food safety. Our surveillance, diagnostic, disease control, inspection, and enforcement infrastructure extends from the international level to the family farm and permits rapid response capabilities.

APHIS' mission is supported by strong investigative and enforcement capabilities that are tailored to support diverse animal and plant health situations. During fiscal year 1994, APHIS completed 283 foreign animal disease investigations and increased traceback and monitoring of certain cattle imported from the United Kingdom to preclude the risk of bovine spongiform encephalopathy entering U.S. cattle herds.

Besides our strength in the animal health arena, the Agency has a national network for plant health services critical to maintaining and improving production. Our plant health monitoring efforts are inextricably linked to agricultural health. In fiscal year 1994, APHIS worked with the States to compile two databases: the National Agricultural Pest Information System (NAPIS) and the National Animal Health Monitoring System (NAHMS). States entered the results of plant pest surveys directly into the NAPIS database, which includes crop hosts, location, weather conditions, pest life stages, crop damage, survey and control methods used on certain pests, and trapping methods. Descriptive data about the occurrence and costs of animal health events were collected from a statistically valid sample of producers for the NAHMS database. NAHMS reports are being increasingly used by producers

to improve health and production efficiency of livestock and poultry. Countries with strong technical and expert infrastructures that are capable of providing the health status of its animal and resources, are in the best position to gain a competitive advantage in global trade.

Pest and Disease Management.—In cooperation with the States, APHIS works to improve the general health of our Nation's multi-billion dollar agriculture industry through management techniques designed to eradicate harmful pests and diseases, or, if eradication is not feasible, minimize their economic impact. These programs provide a hands-on approach to restoring the health of America's agriculture that is affected by specific pests, diseases, or wildlife. Because they include programs for most agricultural animals and plants, the beneficiaries of these programs also include the entire agricultural community as well as all domestic and international consumers of U.S. agriculture.

At the end of fiscal year 1994, 32 States, as well as the District of Columbia, Puerto Rico, and the Virgin Islands, were in Class Free status for bovine brucellosis. Another eighteen States were in Class A status. In March 1994, Texas, the last Class B State, advanced to Class A status. Four Class A States are presently in the qualifying period for Class Free status and are expected to reach that status in fiscal year 1995. Six additional States, each with less than five known infected herds, are expected to enter the qualifying period for Class Free status during fiscal year 1995. At the end of fiscal year 1994, there were 172 herds under quarantine compared to 283 one year earlier. Important gains also continue to be made in eliminating pseudorabies, which had been a significant economic problem in swine until APHIS joined with the States and industry to undertake an eradication program. Twenty-six States progressed to the next stage in the national pseudorabies eradication program and 13 States advanced to Stage V (Free status) in fiscal year 1994.

The Animal Damage Control program conducts research and carries out cooperative activities with other Federal, State, or local agencies, organizations, or private individuals. The program helps protect agricultural and natural resources, property, or endangered species and prevents wildlife hazards at airports or other locations where there is a need to safeguard public health. Direct assistance to livestock producers during fiscal year 1994 included protecting over 11.5 million cattle and over half of the adult sheep production and 70 percent of the lamb crop in the United States. ADC continued to provide assistance to John F. Kennedy International Airport in New York City with an operational laughing gull control program to reduce bird strikes with aircraft. ADC also worked with the Texas Department of Health to seek solutions to the problem of canine rabies in coyotes which has spread to a 16-county area in south Texas. ADC assisted in the research and development of a bait-delivery system to create a zone of vaccinated coyotes along the leading northern edge of the epizootic using a rabies vaccine to orally immunize coyotes. These are examples of ADC providing assistance with issues of human health and safety as they pertain to wildlife. In fiscal year 1994, ADC conducted a survey of clients who had received direct control services. Of those surveyed, 94 percent believed that their losses would have been greater without ADC's help.

The southeast boll weevil eradication program continues to be successful. In fiscal year 1994 eradication was confirmed in south Alabama, Florida, and most of Georgia. Northeastern Alabama entered its second full season of program activity, while northwestern Georgia and central Alabama commenced program activity. Early in the fall of 1994, the remaining areas of northern Alabama, along with adjacent areas of Mississippi and Tennessee, joined the expanding program. The Central Eradication and Suppression Program has been successful in protecting over 3 million acres of weevil-free cotton on the High Plains of West Texas and New Mexico.

Animal Care.—APHIS carries out activities designed to ensure the humane care and handling of animals used in research, exhibition, the wholesale pet trade, or transported in commerce. Primary emphasis is placed on inspection of facilities and their records, investigation of complaints, reinspection of problem facilities, and training of inspectors. Ninety-three cents of every program dollar is spent to cover basic salary and personnel benefits costs for program personnel to conduct inspections and investigations. During fiscal year 1994, APHIS investigated and resolved 642 complaints and inspected 13,371 licensees and registrants. We developed a plan to initiate negotiated rulemaking for revisions to the Animal Welfare Act standards for marine mammals, and performed an external review with stakeholders of the horse protection program. We also conducted a traceback effort to determine the extent to which random source animal dealers may be moving stolen dogs and cats through wholesale and research channels, as well as a large-scale management review of office systems and inspection records for dealers and research facilities throughout the central United States. APHIS incorporated the use of infrared thermography in the horse protection program on a pilot basis and contracted with

infrared manufacturers for the procurement of cameras and the delivery of formalized training of program personnel. The results of their use will be evaluated in fiscal year 1995.

Scientific and Technical Services.—APHIS develops methods to control animals and pests that are detrimental to agriculture, wildlife, and public safety, and to bring the benefits of genetic research to the marketplace, while protecting against the release of potentially harmful organisms into the environment. APHIS also conducts rapid and sensitive diagnostic tests and improves reagents that support monitoring and surveillance programs and the import/export industries.

In fiscal year 1994, ADC's Denver Wildlife Research Center (DWRC), the only facility of its kind in the world, continued to develop and validate methods of chemical analysis and to provide data for registering and re-registering chemicals. Among other projects, in fiscal year 1994 DWRC progressed in research to identify an immunocontraceptive for use on deer and other mammals as a method to resolve site-specific wildlife problems. Approximately 65 percent of the methods development effort was devoted to developing alternative nonlethal methods such as bird repellents, varietal resistance of crops to vertebrate damage, habitat manipulation, and immunocontraception.

In fiscal year 1994, final environmental impact statements were published for Mediterranean fruit fly, Asian gypsy moth, and importation of logs and lumber. Altogether, APHIS prepared 21 environmental documents. In the biotechnology area, the volume of transgenic plants tested in the field and coming to the marketplace continues to increase. APHIS issued 77 release permits, a significant decrease from 141 in fiscal year 1993. This decrease was due to the regulations published on the notification process which eliminated the need for release permits for the less complex cases. APHIS issued 780 notifications for release, interstate movement, and importation in fiscal year 1994, more than it had issued permits for release in the prior 7 years, and expects to issue between 1,000 and 2,000 in fiscal year 1995. This process has saved an estimated 10,000 to 20,000 staff-hours. This is a good example of a cost-effective method that removes the excessive regulatory burden on the biotechnology industry without compromising public health or environmental safety. APHIS also issued 118 product licenses, including the first license for a recombinant virus-vector vaccine (Newcastle disease fowlpox) and the first vaccine in the United States for a respiratory form of Porcine Reproductive and Respiratory Syndrome.

Initiatives

Next, I would like to mention several important initiatives which will help us to do an even better job in 1995. This year APHIS will strengthen AQI pest exclusion programs by improving work force productivity through the establishment of national and regional partnership councils and by preparing for emerging trade issues to assist in securing export markets for U.S. plant products; such exports increased by \$380 million last year. In another initiative, we are working with land management officials and other stakeholders to expedite the development of local environmental assessments and other required National Environmental Policy Act documents to avoid any interruption in control activities. And, closer to home, we will continue to build a diverse work force and develop an agency-wide, systematic approach to work force and succession planning, as well as increase the multi-disciplinary skill levels of APHIS personnel.

Other notable efforts include developing proposals to tighten the requirements for dealers who buy and sell animals regulated under the Animal Welfare Act and to improve the health and well-being of marine mammals and farm animals regulated under the Animal Welfare Act.

We are standardizing procedures for foreign preclearance programs and evaluating existing activities to ensure continued effectiveness; our overseas personnel are playing an increasingly important role in promoting U.S. agricultural trade abroad and acting as technical advisors in discussions of phytosanitary and sanitary trade issues and import/export protocols. To improve program delivery, increase opportunities for communication, and save costs, we are working toward collocating some foreign offices with the Foreign Agricultural Service. We are continuing to incorporate regionalization and risk assessment elements in development of protocols to comply with NAFTA and GATT.

APHIS continues to place a high priority on advancing cattle and swine brucellosis eradication efforts and is working cooperatively with other Federal authorities to combat brucellosis in bison in the Yellowstone National Park. We will continue to work with the Food Safety and Inspection Service in transferring the pre-harvest food safety functions and assist in the delivery of on-farm food safety where we can add value, and provide a more effective and efficient service. We are assisting the animal industries in developing their own quality assurance programs and enhanc-

ing program responsiveness in dealing with possible outbreaks of destructive foreign animal diseases.

On February 1, we published our final rule on procedural regulations for implementing National Environmental Policy Act, specifying Agency actions for which an environmental assessment or environmental impact statement is required, as well as those excluded from NEPA analysis. We are utilizing elements of the total quality management philosophy to integrate activities performed in Veterinary biologics licensing, and plan to implement an automated computer system for submitting biotechnology notifications and permits.

Reorganization Accomplishments

As part of our long-range streamlining plan, we will eliminate 657 staff years by fiscal year 1999, primarily in supervisory, administrative, and headquarters positions. Thus far, 126 such positions have been eliminated through buyouts. Those remaining will likely be eliminated through normal attrition. We will more than double the current supervisor-to-employee ratio. At the same time, we are closely scrutinizing the way we do business through a "future search" process to make certain that our streamlined organization continues to meet the needs of our stakeholders.

Headquarters restructuring initiatives should be completed by fiscal year 1996. Eighteen field offices have been closed since fiscal year 1992; eight more will be eliminated this year. During fiscal year 1995, we will also finalize plans to reduce the number of regional offices through collocation and consolidation of program functions.

APHIS has eight reinvention laboratories formally recognized under the National Performance Review. One, the Minneapolis Field Servicing Office reinvention lab on leasing and small purchases, received the Vice-President's Hammer Award. Three others have received Heroes of Reinvention awards.

FISCAL YEAR 1996 BUDGET REQUEST

The current law request proposes \$430.3 million for salaries and expenses, a decrease of \$6.8 million from the fiscal year 1995 current estimate of \$437.1 million. Of the proposed amount, \$100.3 million would be derived from AQI user fees, an increase of \$3.5 million over the fiscal year 1995 level because of increased international traffic. APHIS proposes that fees collected in the AQI user fee account remain available without further appropriation action to better provide services that are driven by demand. The budget requests \$12.5 million for buildings and facilities which includes \$7 million to fund repairs, alterations, and renovations at existing facilities and structures, \$3.5 million to fund the APHIS share of the Plum Island Animal Disease Center modernization, and \$2 million to go towards constructing Phase IB of the National Wildlife Research Center in Ft. Collins, Colorado.

The budget requests \$20 million for the contingency fund, an increase of \$15 million from the fiscal year 1995 level, to quickly respond to emergencies and reduce the need to transfer funds from other sources. This increase is being financed by an approximate 15-percent across-the-board reduction in base funding for all Pest and Disease Management programs. These programs will be reduced \$25.4 million from the fiscal year 1995 level and were chosen for reduction because they have more flexibility in terms of meeting eradication targets and the greatest potential of attracting increased cooperator support.

APHIS proposes to establish a new budget line-item structure for plant health and international activities that more accurately describes funding based on the functions performed. Currently, the line items involving plant diseases or pests, and international activities represent either a specific pest or disease, a prevention or control program, or technical support. The proposed functional budget would provide for consistent disease management, and scientific and technical services by providing greater flexibility to respond to emerging issues. The structure would allow for continued survey and monitoring after eradication activities are completed to prevent reintroduction from occurring. This new budget structure is similar to the restructuring of animal health activities that became effective in fiscal year 1994 and has proven to be successful in facilitating program delivery.

In fiscal year 1996 APHIS is seeking legislative authority to collect user fees for selected activities in: 1) biotechnology permits—to recover \$1 million for the cost of services provided to issue permits and notifications to test biotechnology products, and to review petitions for non-regulated status for products created through biotechnology, 2) veterinary biologics—to recover \$3.5 million for the cost of regulating the sale, manufacture, and distribution of veterinary biological products in the United States, and 3) animal welfare—to recover \$3.7 million for the cost for inspecting, licensing, and registering dealers, breeders, exhibitors, research facilities, carriers, and in-transit handlers of animals. Currently, we collect approximately \$800,000 an-

nually in animal welfare license fees. However, funds presently go to the General Treasury and APHIS does not have access to those funds. The legislation would save taxpayers approximately \$8 million during the first full year of fee collection.

CONCLUSION

APHIS' animal and plant health programs protect the marketability of U.S. plant and animal agricultural products in both domestic and international markets. In so doing, we will continue to face many challenges relating to plant and animal pest and disease conditions, increases in agricultural production and trade, and rising public concerns about food safety, environmental quality, and the humane treatment of animals. Because of changes in production, marketing, and public expectations, changes are needed in prevention, control, and eradication strategies. There is a shifting emphasis from animal and plant pest and disease control to animal and plant health, and a corresponding new emphasis on monitoring and surveillance to ensure the health and safety of agricultural products and to achieve global market gains in agricultural trade.

We appreciate the Committee's strong support of our programs in the past, and look forward to meeting the challenge of protecting and strengthening American agriculture in the future. We will be happy to answer any questions.

PREPARED STATEMENT OF LON S. HATAMIYA

Mr. Chairman and Members of the Committee, I am pleased to have this opportunity to represent the Agricultural Marketing Service and to present our fiscal year 1996 budget proposals. With me today are Kenneth C. Clayton, Deputy Administrator for Marketing Programs; Joseph A. Roeder, Director of our Financial Management Division; and Gary E. Scavongelli, Acting Deputy Administrator for Management.

The programs of the Agricultural Marketing Service benefit the agricultural producer, the farmer, and the consumer. The services AMS provides are vital to an efficient agricultural marketing system. The best evidence of this is the fact that our customers are willing to pay for many of those services.

AMS MISSION, PROGRAMS AND GOALS

Before I present our budget request, I would like to review our activities. AMS' mission is to facilitate the strategic marketing of agricultural products, ensure fair trading practices, and promote a competitive and efficient marketplace. Our programs make the private sector marketing system for food and other agricultural products more efficient, dependable, economical and equitable.

Because the mission of AMS is to improve agricultural marketing, our programs serve both the consumers and the agricultural industry. Consumers benefit from our programs in several ways. First, since our programs facilitate the marketing process, consumers are assured of high product quality and broad selection. They also benefit economically since improving the efficiency of agricultural trade reduces the industry's need to raise food prices. From an industry standpoint, AMS services enable producers and traders to strategically market products to their customers. For example, our market news program provides timely, accurate, and unbiased market information which helps producers and marketers of farm products make critical buying and selling decisions. Our voluntary grading and certification programs add value to agricultural products by providing a third-party assessment of quality based on nationally and increasingly internationally recognized quality standards developed by AMS.

A strong customer focus results from AMS' unique position as an agency that derives approximately 75 percent of its funding from voluntary user-fees. These programs' ability to "stay in business" depends on the earnings we generate from our customers who are not under any obligation to buy our services. Our customers request our services only if they believe a proven value is added to their products in the commercial markets. Because our very existence depends on the satisfaction of our customers, customer service is not just a goal but a necessity. Our customers include agricultural producers—food processors, wholesalers, retailers, and distributors—importers and exporters, and Department of Defense, Federal and State institutional procurement officials.

Since the majority of our programs depend on customer requests for our services, AMS has long recognized the need to minimize costs. We must prevent fees from becoming prohibitive in our user-funded programs where the fees charged must equal the cost of operating the program. We extend the same philosophy across the

agency; we look for ways to streamline and contain costs in all our activities. For example, while continuing to meet customer demands, AMS has closed 42 percent of its field offices over the past 11 years. As part of the Administration's reorganization, we expect to achieve additional reductions in employment and administrative costs by continuing to review field office locations for further consolidation.

In keeping with the Secretary's goal to improve operational efficiency by consolidating similar functions, AMS will transfer mandatory egg products inspection activities to the Food Safety and Inspection Service (FSIS) on June 1, 1995. Since this mandatory program protects consumer health by assuring the safety of egg products, it falls within the jurisdiction of the Food Safety and Inspection Service. AMS will continue to operate the Shell Egg Surveillance program in which 1,350 hatcheries and packing plants are monitored to ensure the proper handling of shell eggs. This marketing program enhances fair competition by assuring that shell eggs moving in commerce contain no more undergrade eggs than are permitted in U.S. Consumer Grade B.

RECENT PROGRESS

Today's marketplace is changing and AMS is changing with it. As agricultural trade expands globally and new technologies evolve, we are adapting our services to satisfy our customers' changing needs. For example, our market news program now provides timely information on fruit and vegetable markets in Canada, Mexico, England, Germany, France, Poland and the Netherlands. We also prepare weekly reports on livestock traded in the Japanese, New Zealand, and Australian markets. U.S. producers like these reports, and have requested AMS to include countries in the Pacific Rim. AMS recognizes the importance of information on markets in these countries to U.S. exporters, particularly Japan, which is the leading importer of U.S. meat products. As free trade and competition increase worldwide, access to international market data is becoming crucial to equalizing the competitive position of U.S. agricultural traders in world markets. Price, volume, and quality information allows buyers and sellers to evaluate market conditions and develop international marketing strategies.

Our pesticide data program, begun only a few years ago, is working with the Environmental Protection Agency, or EPA, and the Food and Drug Administration to provide information on pesticide concentrations in selected fresh and processed fruits and vegetables and grain products. We now have a national program that represents more than half of the nation's population and regional diversity. By the end of 1994, the program included 42 of the 47 pesticides on the EPA's priority list. On our behalf, State employees collected approximately 8,400 samples on which they performed almost 40,000 analyses. These analyses detected the presence of over 60 different pesticides. The statistical data generally indicates very low levels of pesticide residues in the sampled commodities. This information is providing a national database of domestic commodities which could be a valuable factor in exporting U.S. products. To our knowledge, this type of data on pesticides in edible product, collected near the consumer level, is not available except in the U.S. In addition, we have received a number of letters from State Departments of Agriculture in support of the pesticide data program.

At the request of the EPA, the pesticide data program has redirected its focus to include processed fruit and vegetable products, grain, and dairy commodities in addition to fresh fruits and vegetables. The planned modifications are a result of the National Academy of Sciences report on "Pesticides in the Diets of Infants and Children." Ten of the twelve commodities now included in the pesticide data program are on EPA's list of high consumption commodities by infants and children. In fiscal year 1994 we added canned and frozen sweet corn and peas to the program. These high consumption commodities for infants and children did not require new testing procedures, although they did require modified sampling sites. In fiscal year 1995, we began sampling grain products to determine the actual residue levels consumed. In fiscal year 1996, we will begin a similar program for whole milk.

In consultation with the National Organic Standards Board, we are establishing the organic certification program, which should begin operations in fiscal year 1996. This program will establish national standards and assure consumers that products labeled as organically grown meet these standards. AMS-accredited state officials or private individuals will certify farms and products as organic. As required by law, accredited agents will charge user fees for certification services.

AMS is also providing technical assistance to foreign countries through the Foreign Agricultural Services' Emerging Democracies program. We are assisting in the development of market information systems in Bulgaria, Kazakhstan, Poland, and Russia. Based on our agricultural transportation and port studies in the former So-

viet Union, we were able to make recommendations that would remove institutional and operational barriers to U.S. exports. The agency also conducted wholesale marketing workshops in Russia and the Ukraine. As a result of the increased trade between the U.S., Canada, and Mexico since the passage of NAFTA, AMS has received and satisfied numerous requests from U.S. exporters for assistance in overcoming logistical barriers to trade.

FISCAL YEAR 1996 BUDGET REQUEST

As you can see, AMS is improving our services to satisfy the continually evolving needs of our customers and to serve the interests of consumers. To continue this progress, we are requesting additional funding in four program areas.

In our first proposal, we request an additional \$556 thousand to continue implementation of the organic certification program. We are all aware of the public's concern over the safety of pesticide use in producing food and other agricultural products. In response to this concern, the Organic Foods Production Act of 1990 required the Secretary to establish and implement national minimum organic standards and a program to certify organic production. AMS has been working with the organic industry and the National Organic Standards Board to establish these national standards and develop an accreditation program. The organic industry today is valued at over \$1.5 billion, and is growing at a rate of 20 percent per year. As the organic industry grows and the implementation of the accreditation program becomes more complex, we anticipate the demands on our financial resources to increase. Beyond the domestic market, AMS recognizes the importance of access to global markets in today's economy, and will seek to facilitate the international marketing of organic products. U.S. producers already face difficulty in exporting organic products to the new European Union. Increased funding will allow AMS to expedite development, ensure labeling integrity, and facilitate global trade.

In our next budget proposal, we request \$351 thousand to fulfill temperature requirements legislated in the Egg Products Inspection Act. As I mentioned, AMS is transferring its "food safety" egg products inspection activities to the Food Safety and Inspection Service but is retaining responsibility for the marketing related Shell Egg Surveillance program. Although the new temperature requirements have food safety implications, AMS will verify compliance with these requirements while performing other Shell Egg Surveillance functions to maintain efficient program delivery. These additional requirements necessitate the use of specialized equipment. Our request will fund the additional time and equipment needed for Federal and State inspectors to perform temperature checks at all registered packing plants and in thousands of transport vehicles.

Environmental and health concerns over the use of pesticides in producing our food supply is an important issue to legislators, farmers, and consumers. In order to fully implement the Pesticide Recordkeeping program mandated in the 1990 Farm Bill, we request an additional \$2.7 million. In fiscal year 1994, AMS provided funding to 9 states to conduct compliance monitoring activities. However, our current budget is inadequate to fund monitoring programs in 5 more states that are interested in participating in our program. We also anticipate the need to perform monitoring activities at the Federal level in, at most, 17 states that do not plan to join our cooperative program. The remaining 19 states already have regulations governing certified private applicator recordkeeping and are expected to continue their programs. The additional funding requested will ensure that pesticide application records are available in every state, U.S. territory, and applicable Indian governing body as required by the Act.

To provide a framework for our last budget proposal, I would like to state that AMS is committed to achieving a diversified work force where the civil rights of all employees and customers are respected. We also seek to further diversify employment in the agricultural marketing sector by expanding training opportunities at universities that have significant minority enrollment. For fiscal year 1996, AMS is requesting \$1.05 million to fully establish a Center of Excellence at Prairie View University. The proposed Center would be for World Food Distribution Training and is a joint effort by several USDA agencies—Agricultural Marketing Service, Economic Research Service, Food and Consumer Service, Foreign Agricultural Service, and the Consolidated Farm Service Agency—with Prairie View and three other Texas A&M system universities. The rapidly changing world agricultural marketplace needs well-trained and knowledgeable people to work in the distribution, transportation, and trade of food and fiber products. The Center would fulfill this need through the expansion of current University curricula to include specialized marketing and trade courses relevant to domestic and world food and fiber distribution. The Center would also support a cooperative education program in which stu-

dents work with federal agencies and private businesses to gain hands-on experience in the food and fiber distribution industry. Program graduates would be uniquely qualified to assist in the delivery of USDA programs and provide support to the private agricultural sector. The Center's focus on promoting minority involvement in the program would serve to increase minority representation in public and private sectors of agribusiness and the food and fiber distribution industry. Significant private sector involvement in this program is anticipated in future years.

LEGISLATIVE PROPOSALS

In the interest of equity and budget reduction, we have also submitted changes to authorizing legislation that would allow AMS to establish and retain user fees for the development of quality standards and to collect assessments for the oversight of marketing agreements and orders.

Quality standards activities are currently funded by an appropriation which is offset by reimbursements to the U.S. Treasury from assessments for grading services. AMS proposes to retain the funds collected from user fees. Since the beneficiaries are now paying for AMS standards, it is inappropriate for the budget to reflect the activity as funded from tax dollars. This proposal would reduce budget authority and streamline the administration of the program and its funding. AMS retention of user fees would generate a savings of \$3.9 million in appropriated funding.

Marketing agreements and orders are issued by the Secretary but administered locally by marketing order committees and market administrators who are funded from assessments on regulated producers and handlers. Federal oversight and administrative support is funded from the Section 32 permanent appropriation. Since our Federal operations directly support local activities, AMS proposes to recover Federal costs for oversight of marketing agreements and orders through increased assessments to those producers and handlers who benefit. The proposal would generate a savings of \$10.5 million in fiscal year 1996, offset by one-time liabilities costs of about \$500 thousand, for a net savings of \$10 million.

BUDGET REQUEST SUMMARY

To summarize, we are requesting a total of \$50.6 million in appropriated funding under current law to support the work of our Marketing Services programs, \$1.2 million for our Federal-State Marketing Improvement program, and \$16.6 million from Section 32 funds for administration of commodity purchase services and marketing agreements and orders. Approval of our legislative proposals to charge user fees for standardization and marketing agreements and orders would reduce our request by \$13.8 million for a total of \$54.6 million in appropriated funds.

Thank you for this opportunity to present our budget proposals. I will be pleased to answer any questions at this time.

PREPARED STATEMENT OF JAMES R. BAKER

Mr. Chairman and members of the Committee, I am pleased to have the opportunity to represent the Grain Inspection, Packers and Stockyards Administration (GIPSA). It's a pleasure to be here today to present our fiscal year 1996 budget proposal. With me today are David Shipman, deputy administrator for the Grain Inspection program; Bob Soderstrom, GIPSA budget officer; and Cal Watkins, deputy administrator for the Packers and Stockyards programs.

GIPSA was established on October 20, 1994, under the authority of the Department of Agriculture Reorganization Act of 1994, to administer the programs and functions of the former Federal Grain Inspection Service (FGIS) and Packers and Stockyards Administration (P&S). GIPSA's two program activities—the Grain Inspection program and the Packers and Stockyards programs (P&S)—play vital roles in American agriculture. The Agency's programs and services promote a competitive, efficient market structure and facilitate the marketing of grains, oilseeds, pulses, rice, livestock, meat, and poultry in domestic and international markets.

The Grain Inspection program serves American agriculture by providing descriptions (grades) and testing methodologies for measuring the quality and quantity of grain, rice, edible beans, and related commodities, and, by providing an array of inspection and weighing services, on a fee basis, through a unique partnership of Federal, State, and private laboratories.

The P&S programs administer regulatory programs which promote fair business practices and a competitive marketing environment for livestock, meat, and poultry.

GIPSA'S MISSION

GIPSA's mission reflects the unique programs of which it is comprised: (1) to facilitate the marketing of grain, oilseeds, pulses, rice, and related commodities by establishing descriptive standards and terms; accurately and consistently certifying quality; providing for uniform official inspection and weighing; carrying out assigned regulatory and service responsibilities; and providing the framework for commodity quality improvement incentives to both domestic and foreign buyers; and, (2) to promote fair business practices and a competitive marketing environment for the marketing of livestock, meat, and poultry by fostering fair and open competition and guarding against deceptive and fraudulent practices affecting the movement and price of meat animals and their products; and protecting consumers and members of the livestock, meat, and poultry industries from unfair business practices which can unduly affect meat and poultry distribution and prices.

GIPSA's role in facilitating the marketing of U.S. grain and related commodities is critical. By serving as an impartial third party, GIPSA ensures that the standards are applied and the weights recorded in a fair and accurate manner, thereby advancing the orderly and efficient marketing and effective distribution of U.S. grain and other assigned commodities from the Nation's farms to domestic and foreign buyers.

To this end, GIPSA's Grain Inspection program administers the provisions of the U.S. Grain Standards Act (USGSA) and the Agricultural Marketing Act of 1946 (AMA) as it relates to the inspection of rice, pulses, lentils and processed grain products. To fulfill its mission of facilitating the marketing of U.S. grain and related commodities, the program:

1. Establishes official U.S. grading standards and testing procedures for eight grains (barley, corn, oats, rye, sorghum, triticale, wheat, and mixed grain), and four oilseeds (canola, flaxseed, soybeans, and sunflower seed) under the USGSA; and for rice, lentils, dry peas, and a variety of edible beans under the AMA.
2. Provides American agriculture and customers of U.S. grain around the world with a national inspection and weighing system that applies the official grading and testing standards and procedures in a uniform, accurate, and impartial manner.
3. Inspects and weighs exported grain and oilseeds. Domestic grain and oilseed shipments, grain and oilseed imported into the United States, and crops with standards under the AMA are inspected and weighed upon request.
4. Monitors grain handling practices to prevent the deceptive use of the grading standards and official inspection and weighing results, and the degradation of grain quality through the introduction of foreign material, dockage, or other nongrain material to grain.

Through these permissive and mandatory programs, the Grain Inspection program promotes efficient and effective marketing of U.S. grain and other commodities from farmers to end users. To better appreciate the impact and efficiency of the Grain Inspection program, consider the following:

USDA's "Outlook for U.S. Agricultural Exports" reports that in fiscal year 1994, U.S. exports of wheat, corn, coarse grains, rice and soybeans were valued at approximately \$13.5 billion. During the same fiscal year, GIPSA, which operates on a user fee basis, collected fee revenue of \$20.7 million for official inspection and weighing services for these exports, or about 0.15 percent of the total value of the exports.

GIPSA remains committed to improving the efficiency and effectiveness of its programs, and to adding value to American agriculture. GIPSA's efforts are apparent in reviewing the cost of its primary inspection and weighing program. In 1987, the cost of the program was \$0.236 per ton of grain inspected. In 1993, the cost per ton inspected increased only to \$0.246.

In fiscal year 1995, GIPSA's commitment to efficiency and effectiveness will be even more valuable to American agriculture as U.S. agricultural exports are expected to reach a record \$45 billion, of which exports of wheat, corn, coarse grains, rice and soybeans are expected to account for \$20.3 billion ("Outlook for U.S. Agricultural Exports," February 1995).

The production and marketing of livestock, meat, and poultry are important to American agriculture and have a significant impact on the Nation's economy. In 1994, the Department of Commerce estimated the wholesale value of livestock, meat, and poultry products to be approximately \$90 billion. At the close of fiscal year 1994, there were 1,404 stockyards; 7,308 market agencies/dealers; and 2,215 packer buyers registered with P&S to engage in the livestock marketing business. There were also approximately 6,500 slaughtering and processing packers; an estimated 6,900 meat distributors, brokers, and dealers; and an estimated 275 poultry firms subject to the P&S Act.

The principal purpose of the P&S programs is to assure integrity in the livestock, meat, and poultry markets and the marketplace. This includes fostering fair and open competition and guarding against deceptive and fraudulent practices affecting the movement and price of meat animals and their products. P&S also works to protect consumers and members of the livestock, meat, and poultry industries from unfair business practices. To meet this mission, P&S programs:

1. Administer the Packers and Stockyards Act of 1921.
2. Carry out the Secretary's responsibilities under Section 1324 of the Food Security Act of 1985, which permits States to establish "central filing systems" to prenotify buyers, commission merchants, and selling agencies of security interests against farm products, and issue regulations and certify the systems that meet the criteria in the statute.

3. Enforce the Truth-in-Lending Act, the Fair Credit Reporting Act, and the Freedom of Information Act as each relates to persons and firms subject to the P&S Act.

The P&S programs are divided into two major areas: Livestock Marketing and Packer and Poultry. In these areas, P&S works continuously to effectively respond and adapt to changing conditions and an ever-changing industry.

ORGANIZATION

GIPSA is comprised of approximately 885 total staff years, including full-time, temporary, and intermittent employees. GIPSA personnel are situated in field locations across the country to serve our customers.

GIPSA is proceeding with a restructuring plan that will reduce the number of field locations from 44 to 36. The Grain Inspection program is streamlining and consolidating its resources into fewer, but better staffed and equipped field offices. The restructuring will improve the performance of the national grain inspection and weighing system, contain the costs to users of the system, and enhance service delivery. Throughout fiscal year 1995, the Grain Inspection program will reduce its field structure from 31 (in fiscal year 1994) to 24 locations.

Federal grain personnel work with over 2,000 State and private inspectors to provide high-quality inspection and weighing services on a user-fee basis. Federal inspectors service 49 export elevators located in Georgia, Illinois, Indiana, Louisiana, Maryland, New York, Ohio, Oregon, and Texas. A small Federal staff also provides service at six export elevators in Eastern Canada for U.S. grain transshipped through Canadian ports. Eight delegated States provide services at an additional 21 export elevators located in Alabama, California, Minnesota, Mississippi, South Carolina, Virginia, Washington, and Wisconsin. Sixty-eight designated agencies service the domestic market under GIPSA supervision. In 1994, this unique mix of Federal, State, and private inspection agencies provided 2.5 million inspections on an estimated 221 million metric tons of grains and oilseeds.

P&S has 11 regional offices strategically located throughout the United States to monitor compliance with the P&S Act. These offices have 10 to 14 employees each and consist mainly of auditors, marketing specialists, scales and weighing specialists, and clerical support personnel.

CURRENT ACTIVITIES

The Grain Inspection program remains committed to facilitating the marketing of U.S. grain by responding to our customers' needs and providing the highest quality grain inspection and weighing services to all of our customers—from farmer to domestic and international end users, and all those in between. The program is responding to its customers' needs, taking steps to ensure confidence in the quality and value of American grain, and is aggressively positioning itself to meet the challenges of the future.

The national grain inspection and weighing system continues to provide accurate and cost-effective services to its customers. In fiscal year 1994, official personnel performed nearly 2.5 million official inspections, 700,000 protein and oil tests, 100,000 mycotoxin tests, and a variety of other services.

The program also continues to respond to the needs of its customers. In November 1994, in response to the concerns of U.S. wheat importers—specifically China, Japan, Mexico, and Korea—GIPSA offered a new official testing service for pesticide residues in wheat. Major U.S. wheat importers' had voiced strong interest in officially testing U.S. grain for the presence of specific pesticide residues.

To respond to the concerns of Soft Red Winter wheat producers, specifically those in southern States, GIPSA is gathering information on the economic importance of test weight in marketing Soft Red Winter wheat in the United States. Producers contend that test weight is an unreliable indicator of end use quality and, therefore, an inappropriate basis for discounts. Wheat millers and foreign buyers believe that

test weight is a good indicator of physical quality and processing efficiency. GIPSA commissioned the USDA Economic Research Service to study the issue. The study is scheduled for completion in fiscal year 1995.

GIPSA continues to actively cooperate with the National Conference on Weights and Measures to develop testing and calibration programs for grain moisture meters and near infrared (NIR) wheat protein analyzers for commercial trade. In fiscal year 1994, GIPSA's Grain Inspection program was authorized as a National Type Evaluation Program (NTEP) Laboratory for evaluating grain moisture meters and tested several models of commercial meters. GIPSA is developing a calibration data collection program to support NTEP grain moisture meters. In fiscal year 1995, GIPSA will conduct NTEP evaluations of additional grain moisture meter models and is preparing to serve as an NTEP laboratory for evaluating NIR wheat protein analyzers.

GIPSA also is working to maintain worldwide confidence in the quality and value of U.S. grain exports. On February 11, GIPSA implemented a prohibition on adding water to grain. The prohibition responds to domestic and international customers' concerns that water is often applied, not to suppress dust for safety and air quality purposes, but to increase the weight of grain and thereby gain a market advantage.

In further efforts to enhance American agricultural exports, GIPSA, in cooperation with the Consolidated Farm Service Agency (CFSA), has undertaken an initiative to reduce the amount of damaged products being shipped overseas, enhance the appearance of U.S. agricultural products in the international arena, and improve the integrity of the foreign food assistance programs. At the request of CFSA, GIPSA developed a modified observation of loading service for vessels loading overseas food assistance products shipped in paper bags. GIPSA began providing the service in August 1994, on a trial basis. CFSA currently is evaluating the effectiveness of the service.

Finally, GIPSA's Grain Inspection program is taking aggressive steps to position itself to meet the challenges of the future. The program has initiated a long-term improvement process to strengthen the program's organizational culture by making quality and customer service priorities. The result will be a program that quickly and effectively meets the changing needs of our customers in the United States and a global marketplace.

The Packers and Stockyards Program continues to provide payment protection to livestock and poultry producers by focusing on the financial area. During fiscal year 1994, six auction markets failed financially owing \$476,600 for livestock. Of that amount, \$274,800 was subsequently recovered from bonds and other sources. For livestock dealers and order buyers, the story is different. During the last fiscal year, 27 dealers/order buyers failed owing \$8.1 million for livestock—only \$1.2 million of which was recovered.

Dealer failures continue to represent a significant amount of unrecovered losses in the livestock marketing chain. Because of these losses, GIPSA has proposed amending the P&S Act to provide for a statutory dealer trust similar to the packer trust for cash sellers of livestock. The dealer trust would require livestock inventories and accounts receivable due from the sale of livestock to be held in trust for unpaid cash sellers when a dealer fails to pay for livestock. The proposed trust would help reduce losses to livestock sellers when dealers fail financially.

Because of continuing concern about the integrity of custodial funds, GIPSA is conducting frequent on-site audits of all custodial accounts. During the past four years, livestock consignors, on average, have recovered 80 percent or more of their losses when auction markets failed financially.

The statutory trust provisions of the P&S Act have been very successful in recovering losses as a result of failures by meat packers and live poultry dealers. During fiscal year 1994, livestock producers were paid \$2 million by 11 packers under the statutory trust provisions. Over the past 5 years, more than \$14.4 million has been received by livestock producers under the trust provisions.

During fiscal year 1994, poultry producers were paid \$1 million by four poultry processors under the statutory trust provisions. Since the P&S Act was amended in 1987, poultry producers have received over \$6.1 million under the poultry trust provisions.

In addition to fulfilling its payment protection responsibilities, the livestock marketing program investigates fraudulent practices, with key priorities being investigating false weighing, weight and price manipulation, switching of livestock, and misrepresentation of the source, origin, and health of livestock.

Because competition for livestock should be open and free of restrictions, GIPSA closely monitors livestock marketing. Any practice, agreement, or understanding that excludes potential buyers from bidding in open competition is considered a restraint on competition. Examples of such practices include apportioning territories,

price agreements or arrangements not to compete, and payoffs or kickbacks to buyers.

The packer and poultry program assures prompt and full payment to livestock and poultry producers; fosters open and fair competition in the procurement of livestock by packers; prevents unfair, discriminatory and deceptive practices in contract poultry growing arrangements; and prevents noncompetitive practices in the marketing of meat and meat products. GIPSA gives high priority to ensuring payment for livestock through bonding, solvency tests, and the packer trust, which has helped reduce losses to producers selling livestock on a cash basis to slaughtering packers.

The poultry provisions to the P&S Act give similar protection to poultry growers and producers through statutory trust and payment provisions. The \$1 million worth of statutory trust payments to poultry producers in fiscal year 1994 is a good indication of the importance and effectiveness of this program.

GIPSA's scales and weighing program conducts extensive weighing investigations. Economic and competitive pressures on individuals and firms engaged in livestock marketing may contribute to falsifying weights to improve income. During fiscal year 1994, 9 percent of the 540 formal weighing investigations disclosed false or questionable weighing. The percentage of these cases has remained relatively constant for the past few years.

Also in the weighing area, GIPSA actively participates with the National Conference on Weights and Measures and the National Institute of Standards and Technology in developing standards, specifications, and tolerances for livestock and carcass scales. GIPSA personnel also develop training programs and instruct State weights and measures officials, private scale testing companies, and scale users.

To ensure that slaughtering packers are actively competing for their slaughter requirements and not engaging in any illegal trade practices, GIPSA has increased the frequency and sophistication of its investigative and surveillance efforts. In addition, the Agency has been conducting semiannual investigations of hog slaughtering firms that use electronic evaluation devices as part of their purchasing programs to ensure that the devices are being used in a fair and accurate manner. Through these investigations, GIPSA can assure producers that the devices are accurate and properly operated and applied.

Livestock producers and other segments of the livestock and meat industry remain concerned about meat packer concentration, packer feeding, and forward contracting. GIPSA continually reviews industry structural change and market performance, and monitors the percentage of cattle owned or controlled by packer firms prior to slaughter (captive supplies) through special reports collected from the top 15 steer and heifer slaughterers each year.

The study of concentration in the red meat packing industry, originally funded in fiscal year 1992, is continuing. The former P&S Administration was asked to conduct this study, in part, because of its authority to obtain and protect the confidential data required for the study. The study will foster greater understanding of concentration and structural change in the livestock and meat industries, and assist in enforcement activities.

In fiscal year 1992, the P&S Administration awarded six research contracts totaling \$491,861. They include: defining regional cattle procurement markets, examining the effects of concentration on prices paid for fed cattle, studying how cattle prices are determined, analyzing the implications of vertical coordination in hog production, thoroughly reviewing literature on competition in the meat packing industry, and assessing the role of captive supplies in beef packing. In addition, the ERS is conducting an analysis of hog procurement in the Eastern corn belt. Data collection for the study was completed earlier this year. A summary report on the six projects will be issued this summer and a report on the final project will be completed by the end of calendar year 1995.

The care and handling of livestock at stockyards has received considerable attention from the media and special interest groups. To address this issue, GIPSA initiated a surveillance program to review the handling practices, services, and facilities at stockyards to ensure that livestock are being handled and cared for properly. The reviews found the majority of stockyards use good care and handling practices, however, problems were identified at some stockyards. Of the 1,415 markets visited, 81 downed animals were observed at 66 markets. As a result of the reviews, GIPSA issued administrative complaints against two stockyards for alleged unreasonable handling of downed animals, and warning letters to seven markets for failure to provide proper care and handling of downed animals.

In administering the clear title provisions of Section 1324 of the Food Security Act of 1985, GIPSA has certified 19 States' central filing systems as of January 31, 1995.

During fiscal year 1996, GIPSA will continue to expand the functionality and performance of its existing Wide Area Network. A key priority will be obtaining additional network software to allow for a seamless interface between the Grain Inspection and P&S programs networks. The main focus of the automation effort will be to make the Agency more efficient and productive in performing its functions.

FISCAL YEAR 1996 BUDGET REQUEST

Under current law, GIPSA's total budget request for fiscal year 1996 is \$66.5 million, of which \$23.7 million represents appropriations. The remaining \$42.8 million represents user fee authority for inspection and weighing services.

For fiscal year 1996, the President's current law budget proposes a total program level for grain inspection of \$53.8 million, with \$10.8 million being appropriated for compliance, standardization, and methods development activities. The fiscal year 1996 budget also proposes legislation to authorize the collection of \$3.6 million in new user fees to cover the costs of grain standardization activities.

For P&S programs, the current law budget proposes \$12.9 million, which includes an increase of \$600,000 to strengthen poultry compliance activities and allow GIPSA to conduct more investigations to prevent unfair, deceptive, or discriminatory practices by poultry dealers. Also included is \$179,000 to provide for a statutory dealer trust to require livestock inventories and accounts receivable due from the sale of livestock to be held in trust for unpaid cash sellers when a dealer fails to pay for livestock.

The fiscal year 1996 budget also proposes legislation to authorize the collection of license fees to administer all activities under the P&S Act. All meat packers, live poultry dealers, stockyard owners, market agencies, and dealers, as defined in the P&S Act, would be subject to the license fees.

CONCLUSION

Mr. Chairman, this concludes my statement. I appreciate the opportunity to introduce one of USDA's newest agencies and would be pleased to respond to any questions you and other members of the Subcommittee may wish to ask.

BIOGRAPHICAL SKETCHES

JAMES ROBERT BAKER

James Baker is the administrator of the U.S. Department of Agriculture's Grain Inspection, Packers and Stockyards Administration (GIPSA). From 1983 until joining GIPSA in November 1994, Mr. Baker was the manager of Lewis Livestock Company in Conway, Arkansas, the largest auction in the Southeastern United States. In addition, since 1985, Mr. Baker has served as chairman of the Arkansas Livestock and Poultry Commission.

Mr. Baker brings with him a distinguished record of service to agriculture and his community. He has served on the board of directors of the Faulkner County Farm Bureau since 1973 and was president in 1986; has been a State board member of the Arkansas Farm Bureau since 1989 and was a national voting delegate in 1981 and 1986; has been a member of the Faulkner County Extension Advisory Board for 20 years; has been a Charter Board Member of the Faulkner County 4-H Foundation Board since 1985, and served as president in 1979 and 1980; and is an advisor to the Future Farmers of America.

His service and dedication to agriculture have been widely recognized. Mr. Baker is the recipient of two Silver Awards and one Gold Award from the Arkansas Production Credit Association; a Four-State Proclamation for service to agriculture; and an Agriculture Alumni Award from Southern State College.

Mr. Baker's "hobbies" are working for and marketing Arkansas agriculture; working with youth who show an interest in agriculture; and raising beef cattle.

Mr. Baker, a native of Glenwood, Arkansas, received a degree in agribusiness from Southern State College in Magnolia, Arkansas. He is married to the former Linda Nelson and has two children, Monica, 19, and Jason, 15.

DAVID R. SHIPMAN

Mr. Shipman has been with the Federal Grain Inspection Service (FGIS) since 1976. In October 1994, as part of the USDA Reorganization, FGIS was combined with the Packers and Stockyards Administration to form the new Grain Inspection, Packers and Stockyards Administration. FGIS now is a program of GIPSA.

Mr. Shipman currently serves as Deputy Administrator, FGIS, and is responsible for managing a national grain inspection and weighing system that is comprised of Federal, State, and private agencies. Under his direct leadership, FGIS administers a nationwide system of official inspection and weighing; establishes and maintains official U.S. grain grading standards; authorizes State and private agencies to perform official services under the United States Grain Standards Act; and provides oversight, guidance, and assistance to non-Federal agencies performing inspection activities at both export and inland inspection points. He also manages a testing program for processed products such as cornmeal, vegetable oil, and crackers. Government purchases of grain-related foodstuff for the military, school lunch program, and various other activities are frequently tested by FGIS for quality and wholesomeness.

Mr. Shipman serves as the alternate U.S. Delegate to the CODEX Committee on Cereals, Pulses, and Legumes. He also serves as chairman of the USDA Committee on Grain Quality.

Mr. Shipman earned a B.S. degree in agriculture and natural resources from the University of Connecticut in 1976. He is married, has three children, and resides in Herndon, Virginia.

ROBERT "E" SODERSTROM

Robert "E" Soderstrom is the Director, Resources Management Division, for the Federal Grain Inspection Service of the Grain Inspection, Packers and Stockyards Administration of the U.S. Department of Agriculture. He has overall responsibility in advising and assisting the Administrator in formulating, coordinating, and administering an Agencywide Administrative Management Program.

During his career, he served as Regional Administrative Officer for the Agricultural Research Service and has served ARS in Utah, Kansas, Texas, Florida, New York, and Saudi Arabia. He came to Washington in 1984 where he has served in his current position.

Mr. Soderstrom is a 1981 graduate of the University of Illinois with an MBA. Prior to his USDA service, Mr. Soderstrom served with the U.S. Marine Corps.

CALVIN W. WATKINS

Calvin W. Watkins is the Deputy Administrator for Packers and Stockyards Programs, Grain Inspection, Packers and Stockyards Administration of the U.S. Department of Agriculture. In this position, he has the overall responsibility of administering the provisions of the Packers and Stockyards Act, a Federal law regulating the business practices of those engaged in livestock, meat and poultry marketing.

During his career, he served as Regional Supervisor in P&SA's California office where he was responsible for P&SA activities in California, Arizona, Nevada, and Hawaii. He came to Washington in 1976 as Branch Chief, Marketing Practices Branch in the Livestock Marketing Division.

Immediately prior to assuming the position as Deputy Administrator, GIPSA, he served as Acting Administrator for the former Packers and Stockyards Administration.

Prior to his government service, Mr. Watkins was employed by the Ralston Purina Company.

REORGANIZATION STREAMLINING

Senator COCHRAN. One of the ideas behind the reorganization of the Department of Agriculture was to streamline and make the operation more efficient, to close offices and consolidate agencies.

You talked about the fact that GIPSA is a product of that reorganization effort in terms of some of its responsibilities.

Does the budget reflect any savings that you know of in the areas under the jurisdiction of your office as a result of the reorganization?

Ms. JENSEN. Well, Mr. Chairman, I will tell you that streamlining the services from Grain Inspection and Packers and Stockyards into one unit is making a difference.

I think that we will see the full impact over the next 2 or 3 years as we are consolidating. I am consolidating the entire marketing and regulatory programs' administrative procedures. We will have one office which deals with personnel instead of three offices. We will have one office that deals with all of the administrative processes and one office that deals with financial policy.

And so as we are going through all the streamlining, you may see a savings of about 200 staff-years in 1996 and up to 1,200 staff-years by 1999 for marketing and regulatory programs. We are closing and collocating offices, too.

These three agencies are each in the process in 1995 of closing eight offices each. So we are beginning to realize those savings, and we are very pleased about it.

But I would like to make the point that for Marketing and Regulatory Programs, over one-half of our budget is user fees. And we also have voluntary programs. Many of our programs, the customer or the farmer, the user, can choose whether or not to use our programs.

So we have to be careful in the consolidation to maintain the integrity of those programs so that as the user fees go into it, those who are obtaining the service can see exactly where their money is going and exactly what it is being used for. So we are being very careful to maintain that accountability.

BOLL WEEVIL ERADICATION

Senator COCHRAN. The program under the APHIS jurisdiction that probably has more interest in my State right now than any other is the boll weevil eradication program. It is a program that was designed to be implemented first in the East and move westward.

We understand now that that is changing. It is the view of some in the administration that we should jump over Mississippi and Arkansas and go to Texas to introduce the program there.

What is the rationale for changing the method of proceeding with that eradication process?

Ms. JENSEN. May I ask Dr. King to address that?

Senator COCHRAN. Certainly.

Dr. KING. Mr. Chairman, thank you.

In my opinion, from what I have seen over the last few years, the boll weevil program has finally achieved an integrated approach.

I think that from the results in North Carolina, South Carolina, and Georgia, we can clearly see the benefits of raising cotton without boll weevil. The trade benefits, as well as the environmental benefits, have happened because for the first time the industry is really supporting this program.

There are referendums that have to be passed in all of these States in order for them to get onboard and be part of the cooperative programs. What we are seeing now are a lot of people wanting to get onboard quickly, whereas in the past, they had been a little slow getting onboard. So as referendums get passed, the 70/30 cost share with industry takes effect.

Texas has been very active in prompting that, but I think there must be an integrated approach. We have made a mistake in the

past by, rather than emphasizing that, instead running from spot to spot. This program expansion could be started from weevil-free areas in the East or West, but not from the remaining infested areas in the Central States that are surrounded by other infested areas.

Senator COCHRAN. I understand that some commitment of funds continued in the Eastern States—Virginia, North Carolina, and South Carolina.

I wonder whether or not emphasis should be placed on extending the program into the new areas rather than providing funds for activities in those areas where the eradication has already been successful.

What are we spending money for in those States?

Dr. KING. It is probably mostly in surveillance, and I will have to get you the exact figures, Mr. Chairman. I do not know them today.

The program that we put together, because it is a cooperative program, really has the stamp of approval from the industry.

When we make decisions about where the funding goes, it is not because we have not checked with the Cotton Council and the industry to do so. These are really decisions that represent the industry's input, as well as ours.

But your point is a good one, and I will find out the exact figures for you.

Senator COCHRAN. OK.

[The information follows:]

*Federal support for boll weevil programs by State/program, fiscal year 1995
(estimated)*

<i>Program / purpose</i>	<i>APHIS share of program cost</i>
Southeast post-eradication and containment (VA, NC, SC, GA, FL, and South AL) ¹	\$457,000
Cooperative agreement with Southeast Boll Weevil Eradication Program Foundation	1,250,000
Southwest post-eradication and containment (California and Arizona) ¹	523,000
Central suppression (Texas High Plains) ¹	717,000
Subtotal, post-eradication	2,947,000
Texas eradication ²	3,551,000
Central Alabama eradication ²	2,017,000
Tennessee Valley eradication ²	4,332,000
East Mississippi eradication ²	2,242,000
Capitalized equipment for eradication activities in the Southeast	517,000
Subtotal, eradication	12,659,000
Geographic information system ³	342,000

<i>Program / purpose</i>	<i>APHIS share of program cost</i>
Environmental monitoring	207,000
Subtotal, other	549,000

¹Includes trapping and treatments of small boll weevil infestations in areas declared weevil free. Approximately 95 percent of the funds for post-eradication activities are used for monitoring/trapping, and the remaining 5 percent for spot treatments. Beginning in fiscal year 1996, APHIS will fund only 15 percent of the post-eradication activities, down from 30 percent in fiscal year 1995. Further revisions that would discontinue Federal support for post-eradication activities will be contingent on the level of funding received through the appropriations process.

²Includes 30 percent of the costs associated with eradication activities (i.e., aerial applications, survey activities) in the Southeast except for Texas, where the Federal contribution is considerably less than 30 percent.

³Geographic Information System currently used by the Mississippi and southwest Tennessee programs.

Note: Excludes program direction and support.

EFFECT OF REDUCTIONS ON BOLL WEEVIL PROGRAM

Senator COCHRAN. I notice the budget request for this program is much less than it was in the previous fiscal year. The fiscal year 1996 request is \$11.01 million, a decrease of \$7.05 million from the fiscal year 1995 level. There is also an indication in the budget request that the staff-years will be decreased by one.

What effect will these reductions have on the ability to continue the program on schedule?

Dr. KING. The reduction is twofold. This year we were fortunate enough to get an extra increase to do some more work in Texas, which is not being requested in fiscal year 1996.

The budget for fiscal year 1996 also proposes a 15-percent across-the-board reduction in certain line items, such as brucellosis, boll weevil, animal damage control, et cetera, in order to build up a contingency fund to respond to emergencies. That is the reason that it is at the requested level.

We have talked to industry and discussed the priorities in terms of continuing the program. I am pleased that we have such good support for this program.

It is a case where the industry has come and said, "Well, we cannot see Federal dollars coming. We are going to move ahead, pass a referendum and go ahead and get on with this program anyway."

Senator COCHRAN. Up to now, the cost share has been APHIS pays 30 percent of the program costs; growers pay for 70 percent of the program costs. Is that a percentage that you expect to continue into the new eradication areas as you implement it?

Dr. KING. It means that because the referendums were passed, we want to keep that commitment with those areas where we are currently working. As for new areas, if there are not Federal moneys to maintain that proportion, it may very well have to change.

Senator COCHRAN. What areas are we talking about now? What areas are included in the ones that would qualify for the existing cost share?

Dr. KING. The ones that are already onboard with an ongoing program.

Senator COCHRAN. Could you give us a list for the record of what you are talking about specifically, and also provide an itemization of the program State by State and by individual program in those States, so we will know where you are spending the money and for what?

Dr. KING. I would be glad to.

[The information appears on pp. 696 and 697 as an answer to a previous question.]

NATIONAL POULTRY IMPROVEMENT PLAN

Senator COCHRAN. The National Poultry Improvement Plan is operating on a budget of \$12 million. Sixty-two percent of the costs are paid by the industry; 36 percent by individual States; only 2 percent by the Department of Agriculture.

Is there any chance of getting any more support out of the Department of Agriculture than 2 percent of this improvement program?

It has been a very effective program. I notice that there is no line item indicated in the budget request. I wonder why that is. Are you trying to get rid of the program?

Dr. KING. No, sir; it is to be consolidated into one of the other line items in veterinary services. I agree with you that the program is a very successful one.

As a matter of fact, we are moving some personnel from Washington, DC, to an area outside of Atlanta to be closer to the industry and to be closer to the researchers so that we can facilitate them better.

Senator COCHRAN. What is the proposed funding level for the program in the budget?

Dr. KING. I will have to get that for you, Mr. Chairman. I do not know exactly. But there is funding for the National Poultry Improvement Plan.

Senator COCHRAN. OK. If you will submit that for the record, we would appreciate it very much.

Dr. KING. About \$250,000, I understand, but I will get you the exact figure.

Senator COCHRAN. A pretty small amount.

Dr. KING. Yes, sir.

[The information follows:]

The proposed funding level for the National Poultry Improvement Plan, within the Animal and Plant Health Monitoring and Surveillance line-item, is approximately \$240,000 for fiscal year 1996, about the same as for the past several years.

IMPACTS OF NAFTA AND GATT

Senator COCHRAN. The budget justification indicates increased agency activities. I think Ms. Jensen talked about the number of inspections of imported commodities and other agriculture products that have to be inspected.

What is the increased need, if any, attributable to NAFTA and GATT provisions that APHIS will have to confront, if any?

Dr. KING. I cannot tell you exactly, except that we hope to write more certificates to move trade forward, about \$46 billion currently.

We hope that as a level playing field is drawn and the standards are set, that the competitive advantage of this country in agriculture and plant and animal research will allow us to take advantage of increased trade opportunities.

We are well prepared to move ahead. We are setting up monitoring and surveillance systems, and are very active in setting the

standards with the world trade organizations. I think we are well prepared to be able to serve the industry that way.

Senator COCHRAN. Does the budget request reflect increases in these areas to permit you to accommodate to the new demands?

Dr. KING. Yes, sir; in two different ways. One is because of the user fees themselves, as when passengers and more materials come in, the user fees collections increase.

The other thing is that we have consolidated some of the plant protection line items into monitoring and surveillance to give us more flexibility, if you will, to be able to move quickly to meet those needs.

COST IMPACT OF NAFTA AND GATT—FSIS

Senator COCHRAN. The Food Safety and Inspection Service has new responsibilities too, as a result of NAFTA and GATT agreements.

Can you tell us, Dr. Reed or Secretary Taylor, whether the budget request submitted for your agency provides the necessary resources to take care of your responsibilities under these agreements?

Mr. TAYLOR. We have not budgeted separately for the potential increase in trade that will affect, obviously, the burden on our import inspection program or, for that matter, the resources we invest in certifying exports.

I think this is a contingency that we are going to have to evaluate as we go along. I think, as Dr. King suggested, it simply remains to be seen what the impact will be on the volume of activity we will have to undertake.

I think we are equipped in the short term to deal with what I would presume to be a relatively gradual increase, but we will have to deal with that contingency as it matures.

GYPSY MOTH

Senator COCHRAN. I understand that APHIS funding for the gypsy moth program is being held up within the administration.

This could be a problem for Southern States where spraying is needed again this spring. Could you tell us what the problem is and when you expect these funds to be released?

Ms. JENSEN. Mr. Chairman, that request has been moved forward. It has been requested from the contingency fund.

Senator COCHRAN. What does that mean? Are the moneys going to be spent, or are you going to continue to hold the funds and not spend them—

Ms. JENSEN. Yes; the money will be spent.

CONTINGENCY FUND

Senator COCHRAN. The budget includes a request to increase the APHIS contingency fund to \$20 million.

I understand this is going to be achieved by a 15-percent across-the-board reduction in all pest and disease management programs.

How is this going to affect the pest and disease management programs?

Ms. JENSEN. Mr. Chairman, some of those programs have been successful in the past, and the cooperators are still working with those programs. We feel that that money can be moved.

But I would like to stress that just because it would go into a contingency fund would not mean that if there were an emergency in one of those areas, that it would not be used for that area, because it certainly would.

By going into a contingency fund, it gives us the flexibility to respond as quickly and efficiently as we can whenever an emergency exists.

Senator COCHRAN. So you do not think there will be any adverse effect on ongoing pest and disease control efforts.

Ms. JENSEN. No, Mr. Chairman, we do not.

MARKETING AGREEMENTS AND ORDERS

Senator COCHRAN. In the AMS area, you talked, Ms. Jensen, about the marketing agreements and orders which are important, particularly in certain areas out West, in various commodity production sectors.

Why does the administration believe that the Federal cost for oversight of marketing agreements and orders should be borne by the producers and handlers?

Ms. JENSEN. Mr. Chairman, this program comes from the producers and is used by them. In this day and age when money is pretty tight, we feel that since this program is used by those folks and fueled by their assessments, then the oversight is also a part of their program.

We would be very, very cautious in looking at how that money is spent, because AMS has many user fee programs. We understand the need to make sure that the assessment is not overly burdensome.

Senator COCHRAN. How would you propose to collect these charges or bill the producers for their portion of the Federal costs?

Ms. JENSEN. I would like Mr. Hatamiya to address that. He has been looking into that very issue.

Mr. HATAMIYA. Mr. Chairman, thank you for that question, and I would like to respond.

Due to the fact that marketing orders and agreements are currently governed at the local basis, they are initiated locally by grower groups that set up committees to oversee the implementation of the marketing orders.

Currently, the local committees are assessing their industries to pay for oversight locally.

What we propose is to take a look at the \$10.5 million of oversight we currently have funded through appropriations and equitably charge those current marketing order committees.

They are already receiving assessments. They would have to increase their assessments to pay for that added cost. But again, this is in the spirit of moving things to user fees.

Almost 80 percent of our programs at AMS are funded through voluntary user fees. We believe marketing orders are a prime example of how the private and public sector can work together.

These are regulations that are created out in the field for self-regulated and self-help programs. In this case, we believe that

shifting to user fees is appropriate to pay for our oversight, which is about \$10 million.

Senator COCHRAN. Has legislation been prepared or proposed formally to authorize the collection of these new fees? We cannot, or we should not, in my view as an appropriations committee, just direct—

Mr. HATAMIYA. That is correct.

Senator COCHRAN [continuing]. That these fees be collected. It has to be authorized by law.

Mr. HATAMIYA. The Department has proposed that legislation be adopted. Again, this is a proposal that I think has been made for the last 10 years. And with the wisdom of Congress, they decided not to adopt it, but we are again proposing it for this year.

POULTRY COMPLIANCE

Senator COCHRAN. There is a provision in the budget for a \$600,000 increase to improve the poultry compliance program. Why is a more comprehensive compliance program needed?

Ms. JENSEN. Mr. Chairman, with the poultry compliance provisions, those are more recently enacted into law than the other livestock provisions within Packers and Stockyards. And this will provide an equalizing basis there.

I might comment, too, that our complaints in the poultry area have been up 200 percent this last year, and we need to be able to respond to those investigative requests.

Mr. Baker may want to make a few additional comments to that.

Mr. BAKER. Thank you, sir.

This is a new area for P&S where you deal with integrated poultry problems. We want to use some of this money to get our people better able to respond to the growers' needs. This will benefit the industry and address the problems. And this is what we propose to do.

Senator COCHRAN. There are several other questions in this area that I have, which I will submit to you or to the agencies directly and ask that you provide us answers for our record so we will fully understand the budget request and the implications of the funds that you say are needed.

COST OF INSPECTION

In the Food Safety and Inspection Service proposal, I notice the funds that are requested to fund the HACCP Program are substantially in excess of the funds that are needed by the FDA to do the kinds of inspections and monitoring of food safety that come within the jurisdiction of that agency.

We have had a hearing already this year on the budget request of the Food and Drug Administration. There are some who are suggesting very seriously that USDA spends eight times more money in employees, nine times more staff, to operate the meat and poultry inspection program than the FDA has to inspect all other food products combined.

How do we justify that kind of allocation of resources?

Mr. TAYLOR. I think in order to understand the differences in the current programs operating at FDA and USDA and the differences in funds that are expended on those programs, it is important to

understand just how different the origin of these two programs has been and in many respects how different the real food safety problems are that the two agencies address.

And again, there is no question that these programs come from completely different origins, one in which, with respect to meat and poultry, there was a realization at the beginning of this century that there was a very special need with respect initially to livestock and then later with respect to poultry. The problems of animal disease and the kinds of insanitary conditions and visible filth that were of such concern at the beginning of this century, and remain of concern to consumers today, needed a very close and consistent, continuous if you will, inspection in order to deal with those problems.

The products that FDA regulates are produced in very different ways. They are predominantly, with the exception of seafood, not dealing with flesh foods and require, in my judgment, a different level of inspection oversight.

I would say, however, that I am not here to advocate on behalf of FDA's budget, but they do not spend enough. They do not have enough in terms of resources to do food inspection. There is a resource issue there, as well.

But we are in a situation in which we have, in the meat and poultry area, a very significant food safety concern. Approximately 75 percent of the foodborne illnesses are associated with meat and poultry products; that is, those caused by the intestinal pathogens, the primary foodborne pathogens, that we are concerned about.

I think it is appropriate that there be a significant inspectional oversight and investment to try to reduce that.

PATHOGEN REDUCTION

Senator COCHRAN. Is it not true though that most of the harmful effects that come from these pathogens can be dealt with not by inspections so much as by proper handling and cooking?

Mr. TAYLOR. Well, there is no question that adequate temperature applied during cooking can kill the bacteria we are concerned about, and we need to continue to educate and encourage consumers and food handlers in commercial settings to do that.

But the reality is that that is not being done, human behavior being what it is. As a consequence, again, we have recited the figures, as many as 5 million illnesses and 4,000 deaths occur annually.

Senator COCHRAN. Yes; but the question is whether you are doing anything as an inspector to solve the problem when the problem can be solved in most cases by cooking the meat and poultry.

Mr. TAYLOR. I think the judgment—

Senator COCHRAN. Is that not right?

Mr. TAYLOR. Well, the judgment we—

Senator COCHRAN. Is that unfair?

Mr. TAYLOR. Well, I think it is. I disagree with the premise that we should leave bacteria unattended at the plant or could afford to leave it unattended as a public health matter and in terms of meeting the public's expectations about the role of Government in overseeing the safety of the food supply. I believe that we should

attend as best we can to the goal of reducing bacteria as much as we can in the in-plant setting.

Of course, that is what our inspection reforms, our HACCP reform, is all about. We recognize that we are not going to produce a pathogen-free sterile product. And people will still have that obligation to prepare the food properly.

But I think there is a wide agreement, really, that we do have to have a food safety program that takes steps that are available at each step along the way, from the farm through the processing plants and to the consumer, to reduce risk. Everybody needs to take responsibility for food safety.

PLANT BLUEPRINT REQUIREMENT

Senator COCHRAN. What justification is available to explain why FSIS requires blueprints of new plants to be approved? FDA does not have any such requirement. Why is that necessary?

Mr. TAYLOR. That is an example of a requirement that we intend to review and see whether that remains viable, given the program, the change that we are bringing about.

But that grows out of the current program and the statutory provision that says that every carcass and every product that comes out of a plant we inspect bears the USDA inspected and passed stamp.

In that respect, that is an environment in which the inspector, in fact, is responsible in a way for the compliance of products coming out of those plants.

These product approval systems have really grown up as a way to give the inspectors the backup so that they can know whether, for example, in the case of facilities, a facility, in fact, is designed so that it can produce a sanitary product.

But again, this is an example of the sort of procedure we need to evaluate: Is that still an appropriate role for us in a HACCP environment?

NATIONAL JOINT COUNCIL

Senator COCHRAN. I understand, and I do not know whether this is true or not, that the agency cannot implement new regulations or approve new technologies without the concurrence of the National Joint Council, which is the inspectors' union.

Is there any statutory requirement of this, or is this something that is practiced within the agency? And, if so, has that caused a slowdown, or have any proposals of the agencies for reform been vetoed by the union?

Mr. TAYLOR. Let me clarify what our obligation is and also what our authority is to make decisions about our program.

We have an obligation, a legal obligation, under the collective bargaining agreement that exists between the agency and the National Joint Council, to bargain over issues that affect the means and manner for carrying out their job.

In furtherance of meeting that obligation, we have established procedures whereby we consult with the union informally, outside of the terms of that formal, legal bargaining obligation.

We consult to identify issues and work together on matters that affect the way the inspection program is carried out. But the ulti-

mate decision about a policy matter and how we are going to conduct the program is still left to the agency.

In my experience, in my 8 months at the agency, we have had an enormously positive and collaborative working relationship. We have discussed a lot of issues with the union representatives, and it has been very productive.

Senator COCHRAN. There is a suspicion that that relationship and the power that the union has over the agency is one reason why the new technologies have been slow to be utilized in inspection.

The theory is that if you can have equipment and new scientific basis for examining microbiological contaminants, you do not need as many people looking at the meat and poultry as you would otherwise have.

If you are looking for microbiological contaminants, you are not going to see them by inspecting them, just by looking at them. That is right.

The fact is that there is this fear that science and technology is going to overtake and make obsolete at least some number of the jobs that the union now fills.

I am told that may be one reason why the agency is slow to get approval of things like the new carcass rinses that help remove pathogens from carcasses. Is that true, in your view?

Mr. TAYLOR. I have just seen no evidence of that whatsoever. In fact, again, we have had a good dialog with the National Joint Council on our whole HACCP rulemaking initiative, which is based on bringing the tools and science of microbiology into the system. And there has been good support.

I think that the union and its members care as much as anybody about food safety, and they are willing to embrace any change that can improve the safety of the food supply.

Senator COCHRAN. Senator Bumpers.

BOLL WEEVIL ERADICATION

Senator BUMPERS. Dr. King, has Senator Cochran covered the boll weevil?

Senator COCHRAN. I did ask a couple of questions.

Senator BUMPERS. Well, for my own edification, let me just say that people in my State are concerned now about whether the funding for that is going to be reduced, because we are still not scheduled until about 1997.

And of course my cotton farmers, particularly with cotton over \$1 a pound, they are really concerned about whether there is going to be funding by the time you get to Arkansas and Mississippi or not.

Is the answer to that, "Yes, there will be"?

Dr. KING. As we looked at our budget—and we will have a slightly decreasing budget in boll weevil—we said that there are three priorities. We met with the industry and asked them to formulate those priorities.

The first is to continue the eradication program at the same level of Federal funding in their active areas, so that we would not force growers to go back for new referendums. Those are at 70/30 splits, where the growers are covering 70 percent of the cost.

Second, then, in new areas, being able to reduce cost shares for new program activity, so the split would not be 70/30. As a matter of fact, the Cotton Council has recommended to the industry that new referendums would not be tied to Federal funding like we have had in the past.

Finally, to be able to distribute equitably across the system, the rest of the funding would be based on what the industry believes we need.

Texas is in a similar situation. They also have a free area, the high plains in Texas, and they want to protect that free status. The idea of being free in the Eastern part and free in the Southwest and protecting the Texas area and kind of moving in, if you will, on a pincher type of approach still makes sense.

COTTON

Senator BUMPERS. I saw a chart the other day—incidentally, this is an aside. I will come back to boll weevils in a moment.

But I saw a chart the other day showing the States that grow the most cotton in this country. Does California still grow cotton?

Dr. KING. Yes, sir.

Senator BUMPERS. How many acres do they have in 1994?

Dr. KING. I do not know, but I can find out for you, Mr. Chairman.

Senator BUMPERS. Does anybody here know approximately how many acres California had in 1994? No?

Is Texas still the biggest cotton-producing State in the country?

Dr. KING. I do not know the exact figures. It is certainly one of them. I will provide the information on California and Texas.

[The information follows:]

California had approximately 1.1 million acres in production during 1994.

Texas is by far the largest, with nearly 5.2 million acres in production during 1994.

BOLL WEEVIL

Senator BUMPERS. Well, how much are you asking for in the budget this year for the boll weevil program?

Dr. KING. It is approximately \$11 million.

Senator BUMPERS. How does that compare to last year?

Dr. KING. Well, last year it was \$18 million, about \$7 million less. But we also had \$5 million added to the budget last year.

Senator BUMPERS. You had \$5 million extra?

Dr. KING. We were fortunate enough to have some extra money added to the boll weevil budget last year. It set us up to deal with the areas of Texas where three new areas wanted to get started.

So we really would be down from about \$13 to \$11 million, were it not for that.

Senator BUMPERS. Well, will \$11 million keep you on schedule?

Dr. KING. Yes; in those active areas under the 70/30 split, it would. However, it would be difficult to pick up new areas, Senator, at that level.

BUDGET REDUCTIONS

Senator BUMPERS. Staff tells me that you are offering a 15-percent across-the-board reduction, I guess in all of your budget, to go into a contingency account. Is that a correct statement?

Dr. KING. In part of the budget, that is correct.

Senator BUMPERS. That is not an across-the-board 15-percent reduction. You do this—you take some—you take more out of some accounts than others.

Dr. KING. It is across the board in the categories we call pest and disease management.

EMERGENCY FUNDING

Senator BUMPERS. And what is the purpose for the contingency account, just to take care of emergencies that occur during the year?

Dr. KING. Yes, sir.

Senator BUMPERS. Has your contingency account been inadequate in the past?

Dr. KING. Over the last decade, we have averaged about \$15 million each year in emergency fund transfers from the Commodity Credit Corporation. Our contingency fund has have been approximately at the \$5 million level each year, as well.

Senator BUMPERS. And by transferring this 15 percent, how much will that put in the contingency account?

Dr. KING. It would increase from about \$5 to \$20 million.

Senator BUMPERS. Why the big increase?

Dr. KING. The reason is that we continue to respond to outbreaks like rabies and Asian gypsy moth and Mediterranean fruit fly.

GYPSY MOTH

Senator BUMPERS. That is a good time to talk about gypsy moth.

I really did not realize until recently that that is a problem for us. Tell me how much money you have in that and what you plan to do with it this year?

Dr. KING. There are two separate areas in gypsy moth. I am not sure which of them you are referring to. We have Asian gypsy moths and—

Senator BUMPERS. You have more than one kind of gypsy moth?

Dr. KING. Yes, sir; Asian and European. The Asian gypsy moths are what come in from other countries, and that is where CCC emergency transfers and the contingency fund have been used, to allow us to meet those emergencies.

This is a new kind of gypsy moth that affects conifers, as well as deciduous trees. It came into the Northwest from Russia.

We had gypsy moths that came in also from Europe, very devastating. We have had two emergency efforts to stop those, which fortunately have been very successful.

We have the European gypsy moth, Senator, which you are probably referring to, that has kind of a southward migration. Our control activities in that program will be funded at a level of about \$1 million this year through the contingency account as well.

The contingency funds would be used to eradicate small infested areas and to prevent materials moving out of those infested areas

into other parts of the country. And we also cooperate with the Forest Service, for areas greater than 640 acres, in which case they would be involved in eradication.

Senator BUMPERS. As I understand it, there is money in the gypsy moth account right now.

Dr. KING. That is correct.

Senator BUMPERS. So staff tells me that you have to start spraying in the spring to be effective in this program. How are you going to do that with no money?

Dr. KING. Those moneys are available and did come out of the contingency fund.

Senator BUMPERS. Is that one of the things you are going to use that contingency fund for?

Dr. KING. Yes, sir.

Senator BUMPERS. Well, you have my blessing.

IMPORTED FIRE ANT

My last question deals with the imported fire ant, which continues to be a big problem in the southern part of my State. I do not know how much money we had in the fire ant program last year. Do you, Dr. King?

Dr. KING. \$1.5 million, Senator.

Senator BUMPERS. We are not making any progress at all on that, are we?

Dr. KING. We are not making very much progress, and I wish I could tell you differently.

Senator BUMPERS. What would you recommend? I think it is a drastic problem, big problem. I know it is in my State.

Dr. KING. It really is.

The long-range answer is probably going to be found in a biocontrol agent. There is research being conducted now by the Agricultural Research Service and some university systems, which we hope will be successful in finding a biocontrol agent with which to attack the fire ant.

We have not had an approved pesticide or chemical since the midseventies to be able to use in agricultural lands. And until that happens, we are going to continue to have problems.

We do have, you know, treatments for backyards that have been approved. Also, we are assured that nursery stock does not move fire ants. That is part of our program.

Senator BUMPERS. What is the chemical we used to use that EPA banned, Mirex?

Dr. KING. Mirex, sir.

Senator BUMPERS. Is this a big problem in Mississippi, too?

Senator COCHRAN. Yes.

Senator BUMPERS. I do not understand. I do not know. You are not asking for any money for this program this year. What do you plan to do if you are not asking for any money, use your contingency fund again?

Dr. KING. We could, if necessary. However, the fact remains that there is no way to really stop the fire ant at present—and it has probably covered most of its ecological range by this time.

There is still money in our programs that will be used for testing as new chemicals come forward. As part of the overall pest man-

agement, monitoring, and surveillance strategy we are putting together, some of those funds could be used for fire ants. The bottom line is that we really do not have an effective tool at this time.

ORGANIC STANDARDS

Senator BUMPERS. Mr. Hatamiya, last year when you were here, you said you hoped to have recommendations for developing a national standard for certifying organic growers, made to the Secretary by June 1994.

What is the status of that program?

Mr. HATAMIYA. Senator Bumpers, thank you for asking that question again this year. Due to the delays in reviewing the entire process—and it turned out to be a very complicated one with the number of materials that we are looking at that are allowable and not allowable in organic farming—as well as developing a definition for what organic is, we are now in the process of drafting the first set of regulations to implement accreditation of certifiers.

There are currently 40 private certifiers in 20 States that have some form of regulations in place. We hope to bring them under a national standard and that is what we are currently working at.

Again, the delay has been caused by the difficulty in terms of trying to bring all those entities together, as well as receiving recommendations from the National Organics Standards Board.

I think as I mentioned last year, Senator Bumpers, we have been doing this on a shoestring budget. We are asking to double the budget this year to fully implement that program for fiscal 1996.

We believe that it can be in place by fiscal 1996, and I recognize the fact that that is well beyond the deadline that was set.

But keep in mind we did not have any funding until just last fiscal year to do anything with this program. So we are doing the best job that we can with the limited resources that have been available to us.

Senator BUMPERS. Actually, you were supposed to develop a standard for certifying organic growers.

Mr. HATAMIYA. Yes.

Senator BUMPERS. What is the purpose for this?

Mr. HATAMIYA. I think it is the same purpose that we have for all of our other standards that we implement for other conventionally produced commodities. Our purpose is for recognition within the international trade community.

We have run into problems trying to get our organic products into the European Union, because we have so many different State-certified organics. They do not really know what organic means in U.S. products.

We decided that it was important to have a national standard that can be recognized worldwide. That means when you see something organic in a store, you truly know what that means, and you do not have 20 different definitions for its meaning. We believe that will be of value in the international marketplace.

As you are well aware, other countries generally will only recognize standards developed on a national basis.

So we believe the value of the sovereign-to-sovereign trade will be the ultimate benefit that is derived from the establishment of this program.

Senator BUMPERS. What are organic growers doing now?

Mr. HATAMIYA. They are working within the existing framework of the 20 State programs. My home State of California has a program that certifies organics there. But that may mean something very different than the State of Washington or even your State of Arkansas.

What we would like to do is marry together so there is a national standard that is uniformly recognized when you buy organic in any State in this country.

Senator BUMPERS. Mr. Chairman, I have a couple questions I will submit in writing.

I want to welcome my friend, Jim Baker, a fine Arkansan that I have known for many years, who is now running the Packers and Stockyards Administration.

Jim, I want to welcome you to the subcommittee this morning.

Mr. BAKER. Thank you.

Senator COCHRAN. They have changed the name of that agency, too. You have to learn it——

Senator BUMPERS. Oh, it is not Packers and Stockyards? It is not Soil Conservation Service anymore?

Senator COCHRAN. It is not the Farmers Home Administration. None of that.

Senator BUMPERS. It is hard to keep up with the acronyms anymore. [Laughter.]

What is Packers and Stockyards?

Senator COCHRAN. GIPSA, an acronym. It is not even a word. [Laughter.]

Senator BUMPERS. Just as I was getting used to the other ones. [Laughter.]

FRESH POULTRY LABELING

Senator COCHRAN. One thing that I would be remiss in not doing is thanking you, Secretary Taylor, for allowing the additional time for public comment on the fresh/frozen issue in terms of your Federal Register promulgation.

I notice that in that Federal Register notice of January 17, it stated that:

The use of the term "fresh" as applied to meat products is not related to temperature. Red meat may be frozen and thawed and then presented for sale to consumers as fresh.

Is that your promulgation? Who is that attributed to? Do you know? Are you familiar with that provision in the Federal Register?

Mr. TAYLOR. I am familiar with the issue, and let me tell you what we think. We have looked at this issue of whether we ought to be proceeding with similar rulemaking to deal with red meat and the use of the term "fresh" to describe red meat, and we believe that similar principles should apply. Whatever the appropriate principles are for poultry should apply to red meat.

When we have looked at the marketplace, a large portion of poultry is sold in so-called chilled packs, where it is sometimes chilled to a temperature that makes it hard to touch and, in our view and in common consumer parlance, thus frozen; and it is very common to ship the product in those chill packs and then sell it thawed.

The same practice, as we understand it, is not common with respect to cuts of red meat. So we have not at this stage initiated rulemaking, because it does not seem necessary.

But we are very open to comment and then considering whether market practices with respect to red meat would make it appropriate to go forward with rulemaking so that the same principles apply. If the principle is that frozen products should not claim to be fresh, that obviously should apply consistently to both meat and poultry.

Senator COCHRAN. Well, fresh is not an opposite of frozen. Unfrozen is the opposite of frozen, is it not?

Mr. TAYLOR. Well, the term "fresh"—

Senator COCHRAN. Fresh connotes like stale—

Mr. TAYLOR. But the term "fresh," I think—

Senator COCHRAN. Is the opposite of fresh.

Mr. TAYLOR. Probably connotes—

Senator COCHRAN. Fresh or not fresh; frozen or unfrozen. It seems to me that you are mixing—it is either an apple or it has to be an orange. I do not know that that is logical.

And let me ask you this in another way then. Current labeling regulations state that poultry may only be labeled as frozen if it reaches zero degrees Fahrenheit or below. That is a fact, is it not?

The proposed regulation does not change this regulation, but a product whose temperature reaches 25 degrees Fahrenheit but not below would have to be labeled as previously frozen.

How can you logically require that if it has never been frozen by USDA's definition? Why is it necessary now to label it previously frozen?

Mr. TAYLOR. One of the most important reasons for extending the comment period was to deal with this very issue that you have identified, the need to reconcile the existing definition of frozen and our proposal, which would use a different temperature cutoff.

As we said in that notice, we do need to examine how to reconcile these. We ought to have internally consistent rules, of course.

Senator COCHRAN. The suspicion in the South is that the Californians want this written into the statute or written into the regulations so that those who are exporting into the California market will have to have a different kind of label. And, therefore, it would be less likely to have as much market share in California as they do now.

That is a suspicion. I do not know what the facts are, but that is the suspicion, and you need to know that that is the suspicion.

Mr. TAYLOR. I understand, sir.

Senator COCHRAN. It does seem to be worthy of note that the California industry, poultry industry, people seem to be spending the most time and effort trying to get this change made than anybody else in the country. That seems to be a fact.

Mr. TAYLOR. The only fact that is important from our standpoint and the issue, the only issue, that we are concerned with is how these products can be labeled for consumers in a manner that is truthful and nonmisleading with respect to their characteristics.

We are going through a public process to resolve that question. That is the guidance we get from our statute, and that is what we are working on.

SUBMITTED QUESTIONS

Senator COCHRAN. OK. You all have been very patient. We have been here a long time. I have a bunch of other questions, some of which are brilliant. [Laughter.]

Those are the ones I am going to submit.

Senator Bumpers, do you have any other questions or comments to make of this panel?

Senator BUMPERS. I do not. Thank you, Senator.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

FOOD SAFETY AND INSPECTION SERVICE
QUESTIONS SUBMITTED BY SENATOR COCHRAN

FISCAL YEAR 1996 BUDGET REQUEST

Question. The budget includes a request for \$10.9 million to provide staffing for all slaughter inspection vacancies, and \$7.719 million for all processing inspection vacancies. The budget estimates that during fiscal year 1996, the total number of slaughter facilities will remain the same as the fiscal year 1995 level, and the number of processing and combination slaughter/processing plants actually decreases during the same period. Also, from fiscal year 1995 to fiscal year 1996, the estimated quantity of meat inspected remains constant at 82 billion pounds of meat and poultry. What is the justification of these increases?

Answer. The supporting material in the Explanatory Notes for our budget request should be updated to reflect predicted growth in meat and poultry production for fiscal year 1996. Historical data since 1985 indicate that red meat slaughter has increased an average of 1.2 percent per year and poultry slaughter has increased an average of 6.3 percent per year. Consequently, the estimated quantity of meat and poultry to be inspected in fiscal year 1996 will increase to approximately 84 billion pounds. In anticipation of this increase, we need additional inspectors to staff new and expanding slaughter plants, and to fill current inplant vacancies. In the past two years we were allotted additional inspectors to cope with the growing industry demand and to reduce the escalating inplant vacancy rate of the Agency. Even though we hired additional inspectors, the need for more inspectors has increased over the past two years due to continued industry growth and budget constraints. The 1996 Budget requests an increase of 444 inplant staff years to relieve this critical staffing shortage.

Question. The budget also indicates savings from the reduction of non-inspector positions. The budget indicates a reduction of staff years at the headquarters level from 794 in fiscal year 1995 to 773 in fiscal year 1996. During the same time period, staff year levels in the field increase from 9,165 to 9,588. Can you please explain to the committee why, during this same period, personnel costs at the headquarters level increases 15.5 percent, while personnel costs in the field increase only 8.6 percent?

Answer. The "Classification by Objects" table found in the Explanatory Notes shows an incorrect distribution of personnel compensation between headquarters and field personnel by excluding the appropriations transfers from the Agricultural Marketing Service and the Animal and Plant Health Inspection Service on a comparability basis for fiscal year 1994. Excluding the transfers for fiscal year 1994 resulted in baseline errors and an incorrect distribution for fiscal years 1995 and 1996. The correct distribution would show headquarters compensation at \$33.8 million in fiscal year 1995 with an increase to \$34.6 million in fiscal year 1996, an increase of 2.5 percent; and field compensation would be \$314.4 million in fiscal year 1995 with an increase to \$345.8 million in fiscal year 1996, an increase of 10 percent.

PATHOGEN REDUCTION PROGRAM

Question. The budget indicates that \$14.184 million was available for the Pathogen Reduction Program in fiscal year 1995, and requests an increase of \$11.9 million for fiscal year 1996. The fiscal year 1995 Agriculture, Rural Development and Related Agencies Appropriations Act provided this agency with \$516.738 million in fiscal year 1995, a freeze at the fiscal year 1994 level. From where was this \$14.184 million transferred?

Answer. The FSIS 1995 appropriation of \$516.7 million includes \$8.0 million for the Pathogen Reduction Program. The additional \$6.2 million will be transferred from the Animal and Plant Health Inspection Service by September 30, 1995 for the animal production food safety program.

Question. Was this committee notified?

Answer. The transfer of funds to FSIS is pursuant to the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994, Public Law 103-354. Documents provided by the Department to the Committee on the Reorganization Act of 1994 reflected the transfer of functions of Pre-Harvest Food Safety from the Animal and Plant Health Inspection Service, and Egg Products Inspection functions from the Agricultural Marketing Service.

Question. Is any of this money intended for use in development of a tracing program to trace individual animals from the slaughtering or processing facility back to the farm?

Answer. Yes. Some of the \$6.2 million transferred from the Animal and Plant Health Inspection Service, APHIS, will be used to improve animal identification programs which could serve as a basis for research on microbial pathogens and enhance residue violation tracebacks. We are coordinating these efforts with other USDA agencies, producers, State agriculture and health officials, and other Federal regulatory agencies.

USER FEES

Question. The budget assumes the collection of user fees during fiscal year 1996 for anything beyond a primary shift. Under this proposal services required beyond a regular eight hour shift, or ten hours in cases where plants run ten hour shifts for four days a week, would be counted as overtime and the slaughterhouse or processing plant would be required to reimburse the government for the full cost of inspections. This would apply to those plants that regularly run a second shift as well as to those that periodically run a few hours over an eight hour shift. Under current law, the government provides inspection services at no charge to plants that operate a second shift on a regular basis. If the second shift goes over, or if a plant that normally operates a single shift goes over, they are charged overtime by the government to cover the costs of the inspectors. It is estimated that this fee would save approximately \$106.7 million in fiscal year 1996. Have you submitted legislation to the appropriate authorizing Committees of the Congress?

Answer. USDA's legislative proposal seeking user fee authority was submitted to the President of the Senate and the Speaker of the House of Representatives on March 24, 1995.

Question. How does this proposal differ from the one submitted last year?

Answer. The proposal remains unchanged from last year. The same provisions for meat, poultry, and egg products are included in the 1996 proposal as in the 1995 proposal.

Question. What is your estimate of the actual fee to be charged?

Answer. If the Congress enacts legislation permitting the collection of user fees for inspection services beyond a primary approved shift, the actual fee will be determined through the rulemaking process. The Agency will initiate rulemaking procedures and evaluate a range of alternatives to implement the new user fees and the method for determining the actual fee. All interested segments of the public will be invited to participate in the development of those regulations as we work to address all concerns of equity and to minimize administrative burdens.

Question. The budget indicates that the "fees are estimated to have a negligible impact on prices." What exactly is negligible?

Answer. The industry cost of the proposed user fee is estimated at less than two tenths of one cent per pound of product produced.

Question. Who prepared this estimate?

Answer. The Agency prepared this estimate and it is based on the estimated savings from collection of user fees for meat and poultry inspection, \$105 million, and the fiscal year 1994 amount of meat and poultry produced, 80.7 billion pounds. The estimated total savings includes an additional \$1.7 million from user fees for egg products inspection.

FRESH VS. FROZEN

Question. I would first like to thank you for responding to my request and the request of other Senators and industry to extend the comment period on the regulations regarding labeling requirements for fresh versus frozen poultry. I do have some additional questions in regard to this matter.

The Federal Register notice of January 17, 1995, states that, "the use of the term 'fresh,' as applied to meat products, is not related to temperature. Red meat may be frozen and thawed, and then presented for sale to consumers as 'fresh.'" Why are you proposing to label poultry, when similar labeling requirements are not justified for other meat?

Answer. The term "fresh" has been used historically to describe raw poultry carcasses and parts of carcasses that have not been previously frozen to 0 degree Fahrenheit or below. With respect to red meat, the term has been used historically to describe products that have not been cured. Thus, use of the term "fresh" as applied to red meat products is not temperature-related. The Agency believes that use of the term "fresh" as applied to poultry has acquired marketing significance and offers a meaningful distinction to purchasers between frozen and never frozen products. FSIS is not aware of similar consumer concerns about the labeling of red meat products.

Question. Why is there so much interest in this issue in California, but not in the rest of the country?

Answer. Interest in this issue is not limited to California. As part of its policy review on this issue, FSIS conducted public hearings nationwide, in Georgia, Washington, D.C. and California, to gather consumer input on the meaning of the term "fresh" with respect to raw, uncooked poultry products. Most consumer representatives at the public hearings viewed the term "fresh" as it applies to poultry to mean that the product is not hard to the touch and has never been held at internal temperature below 26 degrees Fahrenheit.

Additionally, USDA's Food Safety Hotline questioned 200 callers to determine their perceptions of the term "fresh" relative to raw poultry. Results of the survey again showed that the term "fresh" is generally associated with product not being frozen, i.e., hard-to-the-touch.

Question. Currently, FSIS labeling regulations state that poultry may only be labeled as "frozen" if it reaches 0 degrees Fahrenheit, or below. The proposed regulation does not change this restriction, however, a product whose temperature reaches 25 degrees Fahrenheit, but not below, would have to be labeled as "previously frozen." This seems terribly inconsistent. If it has never been frozen by USDA's definition, why is it necessary to now label it "previously frozen?"

Answer. The Agency is aware that products that are chilled to temperatures in the range of 20 degrees Fahrenheit to 25 degrees Fahrenheit and sold in the thawed state are not the same in terms of shelf-life as products frozen to 0 degree Fahrenheit or below for long-term preservation. However, product chilled to temperatures in the range of 20 degrees Fahrenheit to 25 degrees Fahrenheit is hard-to-the-touch and, therefore, frozen in the view of most consumers. On March 20, 1995, the Agency issued a notice to solicit comments to reconcile any confusion that may be caused by dual use of the word "frozen" to describe the two different products. In this notice, the Agency also identified several other labeling options that might resolve any such confusion. It is the Agency's intent to ensure that any final rule it may adopt appropriately reconciles the existing definition of "frozen" and the proposed use of the term "previously frozen."

HACCP REGULATIONS

Question. In February, FSIS issued a proposed regulation which, among other things, would implement a mandatory Hazard Analysis and Critical Control Point, HACCP, program. This program would be implemented in addition to the current carcass-by-carcass, organoleptic inspection system we currently have. Many in the meat industry have applauded your efforts to initiate this new inspection approach.

Many industry and consumer groups have acknowledged that the addition of 200 or 2,000 new inspectors will not enable inspectors to see the pathogens which have been at the root of the food safety debate. Also, the General Accounting Office has recommended major reforms of the current inspection program. If the HACCP program is considered to be the best method of reducing these harmful pathogens, why then are you not including some type of a phase-out of the current inspection program?

Answer. The current carcass by carcass, organoleptic inspection system addresses features related to FSIS' food safety and consumer protection mission that may not be addressed by the industry's use of HACCP. Specifically, these include the detection and removal from the food supply of diseased animals and carcasses, and the detection and removal of visible filth and other defects, many of which relate directly to food safety. We believe that consumers expectations of government inspection activities include an active involvement in ensuring that diseased or defective carcasses are excluded from the food supply. The HACCP program is designed to monitor and control food production processes to reduce, minimize, or eliminate hazards related to food safety. These proposals are focused on modernizing and enhancing the inspection system, not replacing it.

Question. The Food and Drug Administration has jurisdiction over the inspection of seafood. It is my understanding that it does not have an organoleptic inspection process for seafood, but relies instead solely on the HACCP inspection process. Why can't meat and poultry also be inspected only by HACCP?

Answer. There are different public health concerns with the consumption of seafood and of meat and poultry and these differences are reflected in the statutory authorities of USDA and the Food and Drug Administration, FDA. These differences in statutory authority, however, do not preclude the use of organoleptic inspection techniques as a part of an inspection program, either by FDA or USDA, and as a part of an industry production control process, such as HACCP. In fact, both agencies currently use organoleptic techniques. The significant difference in the authorities is not the use of organoleptic inspection techniques, but the statutory requirements for carcass by carcass inspection of meat and poultry.

The current carcass by carcass, organoleptic inspection system

addresses features related to FSIS' food safety and consumer protection mission that may not be addressed by the industry's use of HACCP. Specifically, these include the detection and removal from the food supply of diseased animals and carcasses, and the detection and removal of visible filth and other defects.

NON-INSPECTION ACTIVITIES

Question. Please provide the Subcommittee with details of the resources that you dedicate to activities not directly related to the inspection of meat and poultry, such as approval of plant blueprints.

Answer. A notable feature of meat and poultry inspection has been the development of various "prior approval" programs. These programs require plants to submit information to FSIS on some aspect of meat or poultry plant operation, and obtain a determination that the plant meets applicable inspection requirements.

By requiring that inspectors make an affirmative finding that product is unadulterated before it is allowed to leave the plant, the inspection statutes effectively grant authority to inspectors to oversee virtually any aspect of a plant's operations that might affect these findings. Early in the development of the inspection programs, it became clear that inplant inspectors often lack the training and/or time to make uniformly appropriate determinations concerning certain aspects of plants' operations. Therefore, prior approval programs were developed and largely centralized at FSIS headquarters in Washington, with specialists applying uniform criteria to ensure appropriate determinations.

In conjunction with the proposed rule on HACCP, prior approval programs are being reevaluated. In the next several weeks we intend to publish a notice in the Federal Register which will describe the existing prior approval programs and invite public comment on them to determine whether they can be improved or eliminated. I will be happy to provide the Subcommittee with fiscal year 1994 funds and staff years devoted to prior approval programs.

[The information follows:]

<u>PRIOR APPROVAL PROGRAMS</u>	<u>COST</u> <u>\$ Mil.</u>	<u>FSIS</u> <u>FTE's</u>
Label Approvals	\$2.0	35
Facility Approvals	\$1.2	20
Equipment and Utensil Approvals	\$0.9	15
Approval of Substances	\$0.9	18
Quality Control Program Approval	<u>\$1.5</u>	<u>24</u>
TOTAL, Prior Approval Programs	\$6.5	112

QUESTIONS SUBMITTED BY SENATOR McCONNELL

FRESH VS. FROZEN

Question. I understand that, in addition to establishing a 26 degree F cut-off point for labeling poultry as "fresh," your proposed regulation would require that products with temperatures between 0 degrees F and 26 degrees F be labeled as "previously frozen." Frankly, I have never known either your department or the Food and Drug Administration to mandate what I would consider to be negative labeling except, perhaps, where a safety warning is necessary to protect consumers. In addition if your regulations prohibit labeling poultry as "frozen" unless its internal temperature is below 0 degrees, calling a products "previously frozen" that has never been "frozen" is misleading and illogical. Other than to take sides in an industry trade dispute or to disparage safe and wholesome products, how can you justify this proposal?

Answer. The poultry products which are directly affected by the proposed regulation frequently are kept in the temperature range of 20 degrees Fahrenheit to 25 degrees Fahrenheit and sold in the thawed state. Poultry held in this temperature range becomes hard-to-the-touch and, consequently, is viewed by most consumers as having been previously frozen. Information obtained from Congressional and Agency hearings, letters from consumers in response to the publicity surrounding the hearings, and an Agency survey of Meat and Poultry Hotline callers indicated that consumers are concerned about how poultry products were handled prior to purchase. This information influences their choice of product to purchase and the manner in which they handle the product, for example, whether or not they freeze the product after purchase.

FSIS is aware that poultry products kept in the temperature range of 20 degrees Fahrenheit to 25 degrees Fahrenheit and sold in the thawed state are not the same in terms of shelf-life, as products frozen to 0 degree Fahrenheit or below for long-term preservation. The Agency also is aware of the conflict between the proposal and its existing regulations regarding "frozen" poultry products. Therefore, on March 20, 1995, the Agency issued a notice to solicit comments to reconcile any confusion that may be caused by dual use of the word "frozen" to describe the two different products. In this notice, the Agency also identified several other labeling options that might resolve any such confusion. It is the Agency's intent to ensure that any final rule it may adopt appropriately reconciles the existing definition of "frozen" and the proposed use of the term "previously frozen."

MEAT AND POULTRY EXPORTS

Question. Last May several meat and poultry associations petitioned FSIS to delete the requirement that all shipping containers of products intended for export must bear an official export stamp. Since most, if not all, of the importing countries do not require the stamp, and since FSIS is on record as stating this requirement is not necessary, why is it taking the agency so long to grant the request of petitioners?

Answer. Under current regulations an official export stamp is required on all shipping containers of products intended for export. The proposed rule of October 19, 1993 on Centralization and Automation of Export Certification Process includes provisions that would delete the export stamp requirement. The Agency has not granted the request to petitioners because of comments received concerning the acceptance of the system by countries importing U.S. products. FSIS has contacted these countries to solicit full comments on the proposed rule. Once comments are received and considered, and the necessary resources are available, the Agency will address the provisions requiring an export stamp.

NEGOTIATED RULEMAKING

Question. The President has directed that federal agencies involve the regulated community more in the development of regulations that will affect them, including negotiated rule making. How do you see negotiated rule making fitting in with FSIS' regulatory efforts regarding inspection and food safety?

Answer. FSIS actively encourages the participation of the regulated community in developing regulations that will affect them. To that end, for example, we allotted 120 days for public comment on our recent "Pathogen Reduction/Hazard Analysis and Critical Control Points (HACCP)" proposal. During the first two months of the public comment period, the Agency held 6 informational briefings at different sites across the country. Four technical meetings on matters raised in that document also will occur before the comment period closes on June 5. At this time, we think there is ample opportunity for public input and do not anticipate using negotiated rulemaking.

QUESTIONS SUBMITTED BY SENATOR BURNS

PATHOGEN REDUCTION/HAZARD ANALYSIS AND CRITICAL CONTROL POINTS SYSTEM

Question. I have been hearing from the state talk of a new USDA/FDA rule on meat processing. This regulation is to be retroactive and costs may be repressive to the industry to meet the requirements of the rule. All in response to the deaths which were caused by imported meat, meat which does not need to meet the same standards as our own. Can you explain this new regulation and the proposal at this time?

Answer. FSIS permits imports of meat and poultry only from countries that have established and maintain a system of inspection controls and standards equivalent to those of the United States. This is assured by periodic FSIS reviews of both the inspection program of the exporting country and the establishments eligible to export meat and poultry products into the U.S. and FSIS reinspection of imported products at the U.S. port of entry.

The proposed rule, Pathogen Reduction/Hazard Analysis and Critical Control Points, HACCP, Systems, will be implemented over three years in both domestic and eligible foreign meat and poultry plants after the rule becomes final. The proposed rule would require that: all plants develop and use written standard operating procedures covering plant sanitation; slaughter plants use at least one microbial treatment on all carcasses; all finished carcasses and parts be chilled promptly after slaughter and be kept at certain temperature; all plants develop, adopt, and implement a HACCP system; and all meat be tested for Salmonella. The cost of implementing HACCP has been estimated to be slightly more than two-tenths of a cent per pound of product.

MEAT AND POULTRY IMPORTS

Question. I would also like to hear the USDA interpretation of the recent problems that have been seen with regard to the meat inspectors on the border stations located in Montana?

Answer. In January 1995, Import Facility I-264 in Sweetgrass, Montana sought injunctive relief preventing an individual import inspector from being assigned to the establishment. There has been a long standing difficult relationship between our inspector and the plant management, which culminated in the plant's attempt to seek judicial relief. The plant alleged that it would cause the establishment irreparable harm if the inspector were allowed back into the plant.

On March 3, 1995, the District Court ruled for the Agency, and the inspector was returned to the import facility. In addition, the Agency developed a plan of action for returning the inspector to the import facility. The plan includes: unit inspection involving both import inspectors stationed in Sweetgrass; a rotation plan; a decision making mechanism for on site actions; reporting guidelines; and processes for dealing with difficult managers. Furthermore, the Agency is detailing a series of supervisors to Sweetgrass to ensure the successful implementation of our inspector's return.

Question. Why do we not require the same standards of meat cleanliness on meat arriving into the country as what we put our own packers and processors through?

Answer. FSIS requires the same standards of meat cleanliness for both imported meat and U.S. produced meat. FSIS permits imports of meat and poultry only from countries that have established and maintain a system of inspection controls and standards equivalent to those of the United States. This is assured by periodic FSIS reviews of the inspection programs of exporting countries and establishments eligible to export meat and poultry products into the U.S., and FSIS reinspection of imported products at U.S. ports of entry.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

FRESH VS. FROZEN

Question. In January of this year, you published a notice in the Federal Register asking for comments on proposed requirements that would restrict the use of labels on poultry products denoting "freshness." I believe we all know the genesis of this undertaking and that it really has little to do with consumer protection and more to do with market protection. In regard to your action, I would like to raise the following questions:

On December 20, 1994, ARS submitted a report conducted at your request regarding characteristics of chilled poultry. Among the report's findings was the conclusion that, in terms of "sensory and quality characteristics of product," there was "no clear-cut pattern of change in the sensory characteristics over the temperature range tested." Given this conclusion, and assuming the agency's intent that consumers are not being misled as to product quality, do you think that the proposed changes in "freshness" labeling are necessary at this time?

Answer. The Agency does not believe that the stated conclusion is determinative on the matter of misleading labeling. The Agricultural Research Service, ARS, research included a carefully controlled study on skinless chicken breast fillets boiled in vacuum-sealed polyethylene bags, where the highly trained taste panel did find differences due to temperature for several texture attributes. While the researchers conclude that it is unlikely that the average consumer would detect such differences or that they would be practical, during laboratory analytical sensory testing, product is evaluated under rigid conditions. The Agency has received other opinions, for example: from household consumers and restaurant chefs, from the public hearings, from its survey of Meat and Poultry Hotline callers, and from comments on its rulemaking that fresh poultry is tastier and more moist. Furthermore, consumers are concerned about other matters, such as how product was handled prior to purchase which influences whether or not they freeze the product after purchase.

Question. As further evidence that the proposed changes are an agency response to the legislative (and subsequent judicial actions) related to the California case is that fact that red meat, again, is not subject to these labeling requirements. Can you explain why poultry products are singled out?

Answer. While the issues surrounding the California law and the subsequent litigation prompted the Secretary of Agriculture to direct the Agency to reexamine its policy on use of the term "fresh" on the labeling of poultry products, other information supported the proposed changes. The information was obtained from a joint hearing on June 16, 1994, by two subcommittees of the U.S. House of Representatives on government operations; letters from consumers in response to the publicity surrounding the joint hearing; Agency-sponsored public hearings on use of the term "fresh" held during September 1994 in California, Georgia, and Washington, D.C.; an Agency survey of Meat and Poultry Hotline callers; and an Agency-conducted literature review on the microbiology and quality factors of poultry. Information indicated that the issue of "fresh" labeling of poultry is of significant concern to consumers. To the Agency's knowledge, "fresh" labeling of red meat, unlike poultry, is not a significant issue or concern to consumers because the term "fresh" has neither acquired marketing significance for red meat nor is it generally used to distinguish between the temperature levels of stored red meat products.

Question. I understand that one of the primary reasons you have engaged in this rulemaking is to ensure that "consumer confusion" would be kept to a minimum. I note in your original

proposal the use of the term "previously frozen" to apply to products that, by your own definition, were never "frozen." Do you believe the suggested terms in your March 20 Notice adequately resolve the "consumer confusion" issue?

Answer. In our March 20, 1995 notice, the Agency solicited comments to reconcile any consumer confusion that might arise from dual use of the word "frozen" in terms that describe products as "previously frozen" when chilled below 26 degrees Fahrenheit and "frozen" when chilled to 0 degrees Fahrenheit or below. In addition, the Agency identified several possible options that might effectively resolve any potential confusion. The Agency intends to consider all comments it receives on both the proposal and the notice to ensure that any final rule that might be adopted appropriately reconciles the existing definition of "frozen" and the proposed use of the term "previously frozen."

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

BOLL WEEVIL ERADICATION PROGRAM

The Administration's FY 95 request for the boll weevil eradication program was \$13.08 million. The FY 96 request is \$11.01 million, a decrease of \$7.05 million from the FY 95 appropriated level of \$18.06 million. The request also reflects a decrease of one staff year from this program.

Question. What effect will these reduction have on the continuation of the program? Is there a target date for complete eradication of the boll weevil? Will this reduction move that target date back?

Answer. In FY 1994, the National Cotton Council's Boll Weevil Action Committee recommended that future grower referenda not be contingent on Federal government monetary participation. The requested level of funding for FY 1996 would allow all current program activities to continue uninterrupted without the need to re-vote for higher grower assessments. APHIS will continue to cover 30 percent of the program costs in those areas that were already participating in the program in FY 1994 and will expand into new areas providing a reduced level of Federal funding.

In response to your second question, a target date for complete eradication of the boll weevil has been established. Under the current plan proposed by the industry, eradication would be achieved by the year 2003.

Due to the current Federal funding constraints, growers already agreed that future program expansion would not be contingent on Federal funding. Therefore, we do not foresee the target date being moved back as a result of this reduction. For example, in FY 1995, the program expanded into the Southern Rolling Plains and the Lower Rio Grande Valley of Texas. Growers in both areas agreed to pay for up to 100 percent of the program if Federal funds were not available. With the FY 1995 level of funding, APHIS was able to provide \$4.5 million (20 percent) for eradication activities in these two areas.

Question. It is my understanding that when the boll weevil eradication program was first initiated, it was agreed that the eradication process would begin in the east, and move westward. Producers have patiently waited as the program has progressed from east to west. Now, APHIS has decided to allow Texas producers to begin their program when the Mississippi and Arkansas programs have not been fully implemented. When and why was it decided to abandon this plan and shift eradication efforts to Texas?

Answer. In recent years, the National Cotton Council has held regular meetings allowing growers to revise the boll weevil eradication plan. As a result of these meetings, cotton growers proposed an accelerated plan that would achieve boll weevil eradication 21 years ahead of APHIS' earlier schedule. APHIS, in cooperation with the National Cotton Council's Boll Weevil Action Committee, continues to present growers with the most viable,

biological options for accomplishing a common goal: eradicating the boll weevil. The growers evaluate all viable options and decide on a schedule for program expansion. If the growers' proposed program schedule is logistically feasible and biologically based, APHIS would endorse it and proceed with the new proposal. A logistically feasible and biologically based plan allows for program expansion from weevil-free areas to adjacent infested areas. This program expansion could be started from weevil-free areas in the east or the west, but not from the remaining infested areas in the central States that are surrounded by other infested areas.

Texas producers have demonstrated the ability to initiate the program with reduced Federal funding. They have also recruited experienced program managers from the private sector with experience from the successfully completed program in Arizona. For these reasons, APHIS endorsed program expansion into Texas.

Question. It is my understanding that it is possible that the traditional cost share of this program where APHIS pays for 30% of program costs, while growers pay for 70% of program costs may be abandoned. Does APHIS expect to continue this cost share arrangement with new eradication areas? If APHIS does reduce the Federal cost share, could this not produce a situation where two farmers whose land adjoin each other, but were covered under different producer referenda, could face different grower contributions as a result of this decreased Federal cost share?

Answer. The Federal cost share is contingent on the level of Federal funding available and the growers' willingness to wait for program expansion. Limited Federal funding availability and increased grower demand for program expansion into new areas forced APHIS, with consent from the National Cotton Council, to revise the traditional cost share.

Question: What resources does APHIS commit to states which have eradicated the boll weevil, such as Virginia and North and South Carolina? Would it not be the better utilization of limited Federal resources to concentrate on areas where eradication efforts have not been completed, as opposed to continuing to utilize Federal resources in areas where eradication has already been achieved?

Answer. Due to the current Federal budget constraints, the cotton growers agreed that starting in FY 1996 APHIS would pay up to 15 percent (\$1.6 million) of the program cost in the eradicated areas. In FY 1995, APHIS is covering 26 percent (\$2.2 million) of the estimated post-eradication program cost (\$8.5 million). After FY 1996, growers will decide if Federal funds should continue to be used for post-eradication activities.

In response to your second question, the answer is yes. This is the reason why growers in the eradicated areas agreed to receive a reduced Federal cost share for post-eradication activities. The financial benefits enjoyed by growers in the eradicated areas make it reasonable to ask them to pay the minimal costs of protecting their areas from reinfestation.

Question. Please provide an itemization of the boll weevil program by state and by individual program.

Answer. The information follows:

BOLL WEEVIL PROGRAM FUNDING -- APHIS CONTRIBUTION
FY 1995 ESTIMATES (dollars in thousands)

PROGRAM/ACTIVITY	APHIS CONTRIBUTION
Southeast Post-eradication and Containment (VA, NC, SC, GA, FL, and South AL) <u>1/</u>	\$1,707
Southwest Post-eradication and Containment (California and Arizona) <u>1/</u>	523
Central Suppression (Texas High Plains) <u>1/</u>	717
Texas Eradication <u>2/</u>	3,551
Central Alabama Eradication <u>2/</u>	2,017
Tennessee Valley Eradication <u>2/</u>	4,332
East Mississippi Eradication <u>2/</u>	2,242
Geographic Information System <u>3/</u>	342
Environmental Monitoring	207
Capitalized Equipment for Eradication Activities in the Southeast	517
Program Direction and Support	1,911
Total, APHIS	\$18,066

1/ Includes trapping and treatments of small boll weevil infestations in areas declared weevil free.

2/ Includes all costs associated with eradication activities (i.e., aerial applications, survey activities, portion of cost for capitalized equipment in the Texas Eradication Program).

3/ Geographic Information System currently used by the Mississippi and southwest Tennessee programs.

ANIMAL DAMAGE CONTROL - AQUACULTURE

APHIS has been working with catfish producers in the Mississippi Delta to develop ways to reduce damages caused by fish-eating birds. However, producers remain concerned about the increasing populations of migratory predators, including cormorants, blue herons, and other bird species which prey on commercial fish production ponds.

Question. Please give us a brief report on the progress which has been made in reducing the damages caused by these fish-eating birds.

Answer. Through on-site field visits with individual producers, APHIS representatives identify bird species responsible for damage, help to quantify fish losses, and assist the producers with the development of site-specific management plans. In situations where depredation permits would enhance the effectiveness of nonlethal damage control methods, APHIS recommends that the Fish and Wildlife Service issue a migratory bird depredation permit to the producer, and acts as a liaison between the producer and the Fish and Wildlife Service.

APHIS assesses the effectiveness and practicability of control methods which may be used by catfish farmers to reduce the impact of bird predation. Field studies have been conducted on overhead barrier designs, electrical fencing, and frightening devices. There is also collaboration with other agencies and universities in scientific collections of various fish-eating birds in order to monitor disease transmission, assess parasite relationships between birds and catfish, and determine the genetic characteristics of winter populations of cormorants.

Currently, ADC and catfish farmers are working together on a relatively new damage abatement technique which involves the relocation of cormorants away from areas of intense catfish production. This project has been underway throughout the Mississippi Delta for the past two years.

Question. Will the current program provide long-term relief to commercial fish farmers in the Mississippi Delta?

Answer. Although progress has been made in reducing the economic impact of bird predation, considerable losses still occur. Program efforts may need to be intensified to keep pace with the predicted expansion of fish farming within the Mississippi Delta and to keep pace with increases in fish-eating bird populations.

Question. What are the problems the agency faces in strengthening and expanding this program?

Answer. The predicted expansion of the catfish farming industry along with expanding populations of fish-eating birds have resulted in increased requests for assistance. Cooperators are required to share the cost of these services, and many cooperators are willing to pay 100 percent of the costs. Without compromising streamlining and deficit reduction efforts, APHIS will support this cooperative effort to the extent possible.

Question. What are the Department's current estimates of losses incurred by fish farmers due to bird predation?

Answer. Based on previous surveys of catfish producers within the Mississippi Delta, \$2.5 million in annual losses occur as a direct result of bird predation. Fish farmers spend an additional \$2 million per year to implement their bird damage management plans to keep bird predation losses as low as possible.

Question. The budget proposes a reduction of \$79,000 for this program in FY 96. \$493,000 is available in FY 95. How will this reduction affect this program? Where will specific reductions be made?

Answer. As a result of the proposed reduction, direct control assistance to manage fish-eating bird depredation would be reduced. Additionally, there would be a delay in developing the National Veterinary Services Laboratories in Ames, Iowa.

The proposed program reduction of \$79,000 would be achieved through reduced efforts to manage fish-eating bird depredation in Alabama, Florida, Mississippi, California, and Washington.

ANIMAL DAMAGE CONTROL - OPERATIONS

The budget proposes \$20.188 million in FY 96 funding for APHIS Animal Damage Control (ADC) operations, a reduction of \$6.4 million from the FY 95 level. These reductions will be achieved in part through the closure of statewide ADC offices in seven states, by the closure of 15 district offices, and the subsequent reduction of 138 staff years.

Question. How will these reductions affect the agency's ability to address animal damage problems in the states where these office closures will take place?

Answer. Statewide program terminations would result in a need for the affected States to increase their own animal damage control activities. APHIS program activities would continue at a reduced rate in States where district offices are closed but other ADC offices remain.

Question. The budget justification indicates that 15 district offices will be closed, but lists only 11 states affected (Including Mississippi and Arkansas). Please provide the Committee with a list of the offices proposed for closure.

Answer. This proposal has been revised to include the termination of statewide ADC programs in 6 States instead of 7, and the closing of 16 district offices instead of 15. The information is included in the following chart:

ANIMAL DAMAGE CONTROL OFFICES

STATE	CITIES/LOCATIONS	DISTRICT OFFICES TO BE CLOSED
Alabama	Auburn University	
Arkansas	Little Rock	Stuttgart
Arizona *	Phoenix	
California	Sacramento (two offices)	
Colorado *	Craig, Grand Junction	
Florida	Gainsville,	
Georgia	Athens	
Hawaii	Hilo, Honolulu	
Idaho *	Boise, Twin Falls	
Illinois	Springfield	
Indiana	West Lafayette	
Iowa		Ames
Kentucky		Louisville
Louisiana	Port Allen	Bastrop Crowley
Maine	Augusta	
Maryland	Annapolis	
Massachusetts	Amherst	
Michigan *	St. Johns	
Minnesota	St. Paul	Grand Rapids
Mississippi	Mississippi State University	Stoneville
Missouri	Columbia	
Montana	Billings, Helena	
Nebraska *	Lincoln	
Nevada	Reno	
New Hampshire	Concord	

New Jersey	Atlantic City, Basking Ridge	
New Mexico	Albuquerque, Roswell	
New York	Albany	
North Carolina	Raleigh	
North Dakota	Bismarck, Fargo	
Ohio	Columbus	Sandusky
Oklahoma	Oklahoma City	
Oregon	Coquille, John- Day, Portland	
Pennsylvania	Lebanon, Philadelphia	Harrisburg
South Carolina	Columbia	
South Dakota		Pierre
Tennessee	Brentwood, Nashville	Jackson Knoxville
Texas	Canyon, Ft. Stockton, Kerrville, Kingsville, McAllen, San- Angelo, San- Antonio, Uvalde	
Utah	Logan, Richfield, Salt Lake City	
Vermont		Montpelier
Virginia	Moseley	Blacksburg
Washington	Moses Lake, Olympia (two offices), Union Gap	
West Virginia *	Elkins	
Wisconsin	Sun Prairie	Rhineland Waupun

* Indicates proposed State-wide program closures.

Question. In addition, the budget proposes the elimination of the aerial predator control program, the wolf control program in Minnesota, and the blackbird hazing program in the Dakotas. What savings will be achieved from the elimination of these programs? What effect will the elimination of these programs have on the control of these pests?

Answer. Annual savings derived from the elimination of the aerial predator control program would be approximately \$1,800,000. Cessation of the wolf control program in Minnesota would save approximately \$250,000, and \$368,000 would be saved as a result of discontinuing blackbird hazing activities in the Dakotas.

The blackbird hazing program in the Dakotas was implemented as a temporary measure to reduce blackbird damage to sunflowers until a more effective, long-term solution could be identified. Because hazing is considered to be the least effective of the blackbird control methods currently in use, discontinuing this activity would not have a great impact on blackbird control. For aerial predator control, and wolf control in Minnesota, the affected States would have to assume greater responsibility for these direct animal damage control activities to maintain current levels of success.

Question. The Senate report accompanying the FY 95 Agriculture appropriations bill encouraged APHIS to increase its beaver control efforts in Mississippi. Please provide the Committee with details of the effort and resources expended in Mississippi during FY 95 to address this growing problem. How does this compare to FY 94?

Answer. APHIS has provided \$100,000 for the renewal of a cooperatively-funded beaver control assistance program in Mississippi for FY 1995. Federal funding represents 20 percent of the total budget of this cost-shared program. Non-Federal funds are received from the Mississippi Department of Wildlife, Fisheries, and Parks, the Mississippi Department of Transportation, the 50 counties that participate in the program, and the landowners who are assessed fees when they receive ADC assistance for the management of beaver damage.

ADC responds to requests for assistance with beaver damage management on State, county, and private lands by providing technical assistance and direct control. The level of effort in FY 1995 has remained the same as that expended in FY 1994. However, an additional 8 to 10 counties would currently like to enroll in the program, but funding priorities continue to restrict participation to 50 counties.

In FY 1994, ADC provided \$100,000 towards the Beaver Control Assistance Program. As a result of a \$164,000 allocation provided by the Mississippi Department of Wildlife, Fisheries, and Parks, this program was able to expand its coverage from 47 counties to 50 counties.

IMPORTED FIRE ANT

The budget proposes eliminating APHIS funding for Imported Fire Ant Control.

Question. Can you please tell us why the agency is proposing to do so? What effect will this have on fire ant control efforts

across the South? What resources will APHIS commit to controlling the spread of the imported fire ant in FY 96? How much was committed in FY 95?

Answer. APHIS is proposing to eliminate the Imported Fire Ant (IFA) line item because no effective, efficient, and environmentally acceptable control agents are available for large scale application. Also, since 1985, we have not received any requests from States for cooperative treatment programs and States have, in many cases, proven themselves able to successfully eradicate small isolated infestations outside the regulated area. The IFA is rapidly approaching its natural range in the Southeast, limited by cold temperatures and lack of moisture. Additional spread of IFA to western States can be retarded by the States in cooperation with industry.

Elimination of this line item will have no effect on fire ant control efforts since no effective, efficient, and environmentally acceptable control agents are available for area-wide control on agricultural land. Until an acceptable control product is registered by the Environmental Protection Agency, APHIS cannot conduct any area-wide control activities. If the IFA line item was eliminated and the Federal quarantine was maintained, quarantine regulations could still be enforced by the States providing uniform and consistent guidelines for the movement of nursery products. If the IFA line item was eliminated and the Federal quarantine was dropped, each State would have to establish its own quarantine.

In FY 1996, APHIS will eliminate the IFA line item and all regulatory and survey activities would be conducted by the States. No control activities would be conducted because no effective, efficient, and environmentally acceptable control agents are available. However, we will continue, under the plant methods and biocontrol laboratories line item, to evaluate the efficacy of regulatory treatments to prevent further artificial spread of the IFA. We plan to spend approximately \$500,000 for this effort in FY 1996.

In FY 1995, APHIS committed \$1.5 million to activities carried out under the IFA line item. Over two-thirds of this amount was provided to the States in the form of cooperative agreements. In addition, we plan to spend approximately \$500,000 from the plant methods development laboratories line item in FY 1996.

TROPICAL SODA APPLE

There has been recent attention in the press in Mississippi about a newly introduced exotic weed called the Tropical Soda Apple. I am aware that the Agricultural Research Service is conducting research on control methods for this weed at Stoneville, Mississippi; Tifton, Georgia; and Raleigh, North Carolina.

Question. What is APHIS currently doing to control the spread of this weed?

Answer. APHIS fully recognizes the threat that Tropical Soda Apple (TSA) poses to the cattle industry, agricultural areas, and natural ecosystems of the southern United States. We are concentrating our efforts at this point on education, survey, and management. Currently, we are working directly with representatives

from Alabama, Florida, Georgia, Mississippi, South Carolina, and several other southern States to conduct surveys and encourage land owners to eliminate incipient infestations as soon as they are detected. In addition, APHIS has been working with the States and the Extension Service to develop and distribute fact sheets to educate the public about the potentially devastating effects of TSA. Also, we are using data collected on cattle shipments from Florida to inform the States of high risk areas that may require surveys. In addition, we are recording the results of TSA surveys in our National Agricultural Pest Information System database.

In February 1995, we met with the Southern Plant Board, which consists of representatives from Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Puerto Rico. At this meeting, APHIS accepted responsibility for developing and distributing educational materials, which would be updated continually based on the latest research findings; developing a TSA manual to educate Agency and State employees; and exploring various funding sources to secure and develop these materials. As a result of this meeting, we are planning a blitz survey of several southern States which would involve working with States to conduct TSA surveys at high-risk locations once or twice during the summer months. On March 23, 1995, a proposal to list TSA as a Federal Noxious Weed was published in the Federal Register and we expect the listing process to conclude by late May. Listing this species will help avert further introductions and prevent the artificial spread of the weed into noninfested areas of the United States. Once TSA becomes listed as a Federal Noxious Weed, it may only be moved into or through the United States under a written permit and under conditions that would not involve a danger of its dissemination. APHIS plans to continue cooperating with the States, industry, and the public to protect the United States from TSA and to avert the potential economic and ecological disaster that TSA could cause.

AGRICULTURAL QUARANTINE INSPECTION

The budget request includes a proposal to remove the annual limitation on the utilization of funds in the Agricultural Quarantine Inspection user fee account and allow the agency to utilize those funds without Congressional control.

Question. What is the current balance of the Agricultural Quarantine Inspection user fee account?

Answer. The balance on hand at the end of fiscal year 1994 was \$70,148,402.

Question. Does the reprogramming authority of the Department not allow sufficient flexibility to meet its needs?

Answer. No, the reprogramming authority of the Department does not allow sufficient flexibility to meet the needs of the AQI program. The AQI program is funded through the user fee account, but is limited by the appropriation.

APHIS proposes appropriation language for fiscal year 1996 that would make the entire AQI user fee account available to keep pace with workload demands and cost increases without limitation. We anticipate that workload demands will continue to increase, as evidenced by such events as the upcoming 1996 Summer Olympics to be held in Atlanta, Georgia. In addition to improving service commensurate with user support, the program needs to be able to respond quickly to the opening of new international ports.

If APHIS were to provide the additional staffing and funding necessary to provide a level of service commensurate with stakeholder support through reprogramming, the ramifications to the other areas of APHIS program delivery would be severe. The continued progress in programs that have had terrific gains in recent years, such as Boll Weevil, Animal Damage Control, and Brucellosis, would be impeded. Also, the AQI user fee account would continue to grow to excessive surpluses, which are currently not available to fund the needed services. In addition, funding user fee activities with non-user fee appropriated dollars would be considered cross-subsidization, and as such would be inappropriate.

APHIS CONTINGENCY FUND

The budget includes a request to increase the APHIS contingency fund to \$20 million in FY 96. This will be achieved by a 15% across-the-board reduction in all Pest and Disease Management programs.

Question. How will this affect the Pest and Disease management programs proposed for reduction?

Answer. The information follows:

Line - item	Impact
ADC Operations	Reduce current programs involving direct control. More reliance would be placed on States and private entities to assume responsibility, especially in States or districts where offices would be closed or consolidated.
Aquaculture	Reduce efforts to manage fish-eating bird predation.
Biocontrol	Reduce efforts to develop biological control tools for target plant pests.
Boll Weevil	Transfer responsibility for follow-up activities to growers in areas where the BW no longer exists, and reduce Federal cost-share from current 30 percent in areas currently undergoing eradication.
Brucellosis	Reduction in funds available for depopulation. Curtail lower priority activities such as calfhood vaccination. Goal of eradicating brucellosis by 1998 may need to be extended.
Cattle Ticks	Minimal impact. New technology will permit a reduction in number of tick inspectors.
Plant Pest Management	Transfer some responsibilities to the States (golden nematode), production efficiencies (pink bollworm facility), and curtail lower priority activities (gypsy moth, hydrilla control).
Pseudorabies	Continued direct support for local eradication programs at reduced levels. Program goal of nationwide eradication may need to be extended.

Scrapie	Reduce program training, laboratory certification training, and development of telephone access to the Scrapie Information System.
Tropical bont tick	Eradication phase of program will require 3 years instead of 2. APHIS will provide technical expertise, program input, and cooperative funding at reduced levels.
Tuberculosis	Eliminates funding for whole-herd depopulation.

Question. Will this in any way affect the ongoing pest and disease control efforts of the agency?

Answer. The programs targeted for reduction have more program flexibility in terms of meeting eradication targets, and have the potential of attracting cooperator support. Progress in some programs would be slowed or stabilized, and some target dates for eradication may be extended.

Question. Please provide an itemized list of the affected programs, and the reductions that will be taken from each. Also, please provide account balances for the APHIS contingency fund at the beginning and end of the last three fiscal years.

Answer. I would be glad to provide that information as follows:

PEST AND DISEASE MANAGEMENT LINE - ITEM	1995 Estimated	Across- the board reduction	Other Reductions	Misc. Changes*	1996 Request
Animal damage control - operations	\$26,566	(\$3,878)	(\$2,500)	+\$109	\$20,297
Aquaculture	493	(79)	--	(1)	413
Biocontrol	3,919	(628)	--	(2)	3,289
Boll Weevil	18,066	(2,105)	(5,000)	+ 55	11,016
Brucellosis	27,754	(4,123)	(2,149)	+ 98	21,580
Cattle Ticks	4,574	(733)	--	(4)	3,837
Plant Pest Management	5,511	(903)	(100)	+ 28	4,536
Pseudorabies	4,539	(547)	(1,153)	+ 24	2,863
Scrapie	2,967	(415)	(384)	+ 4	2,172
Tropical bont tick	537	(86)	--	+ 1	452
Tuberculosis	5,494	(880)	--	(5)	4,609
CONTINGENCY FUND	\$4,934	\$15,062 +	--	(\$14)	\$19,982

* Includes pay cost, staff year reduction costs, administrative efficiency reductions, and non-pay inflation adjustments.

The account balances for the contingency fund for the last three fiscal years are as follows:

APHIS Contingency Fund 1992-1994 (dollars in thousands)		
Fiscal Year	Beginning Balance	Ending Balance
1992	\$8,583	\$2,930
1993	7,930	2,086
1994	7,025	4,266

PSEUDORABIES

The budget proposes FY 96 funding for the pseudorabies program at \$2.839 million, a reduction of \$1.7 million from the FY 95 level of \$4.539 million.

Question. What is the target year for pseudorabies eradication?

Answer. The goal of eradication is the year 2000.

Question. Will the target be moved back as a result of this reduction?

Answer. No. In the past fiscal year, each State has made significant progress towards eradicating pseudorabies. If States continue to make significant progress and increase their contributions to the program, the budget proposal should have little impact on the projected eradication date.

USER FEE PROPOSALS

The fiscal year 1996 budget includes three legislative proposals to require beneficiaries of services provided by the Animal and Plant Health Inspection Service to pay the costs of these services. User fees are proposed:

- (1) To impose fees on facilities and establishments required to be registered under the Animal Welfare Act, but currently not subject to a fee. This proposal is estimated to save \$3.7 million.
- (2) To allow for the collection of fees for veterinary biologics licensing, inspection and testing activities. This proposal is estimated to save \$3.5 million.
- (3) To impose fees on industries licensed under the Virus-Serum-Toxin Act and authorized for field tests, movements, and importation of biotechnologically derived

products under the Federal Plant Pest Act and the Plant Quarantine Act. This proposal is estimated to save \$1.0 million.

Question. Has the Administration submitted its legislative proposals to charge fees for Animal Welfare Act registrants, veterinary biologics licensees, and Virus-Serum-Toxin Act licensees?

Answer. No, we have not. It is our goal that the proposal to collect user fees for animal welfare, permitting activities, and veterinary biologics will be submitted to Congress by mid to late April 1995.

Question. What level of fees would a user be required to pay under these proposals?

Answer. We are working diligently to determine fee categories that will be used as the base of calculation for the fees. The fee categories would be included at the time of publication of the proposed rule.

Question. How would these fees affect the research at universities, the development of new biotechnology-derived products, and other new veterinary biologics?

Answer. The proposal will include exemption language that would give the Secretary flexibility to include or exclude entities as needed. This would ensure that the fees do not unduly burden non-capital entities. Additionally, these exemptions could cover other Federal agencies and non-profit organizations conducting biotechnology and veterinary biologics programs.

BIOCONTROL PROGRAM

The budget proposes reducing FY 96 funding for biocontrol programs by \$628,000, from \$3.919 million available in FY 95 to \$3.291 in FY 96. Included in the biocontrol program is the sweetpotato whitefly.

Question. What specific reductions will be made to accommodate this decrease?

Answer. Under the new biocontrol line item in FY 1996, APHIS would cancel its support to cooperators for the release and establishment of new species of exotic natural enemies to combat the euonymus scale. Also, the Agency will significantly reduce the implementation of new biological control initiatives for common crupina (rangeland weed), purple loosestrife, and the pine shoot beetle. These initiatives involve collecting and releasing species of natural enemies that have been proven effective against common crupina, planning activities to establish a release program for natural enemies of purple loosestrife, and surveys and implementation activities for a program to examine management techniques for the control of pine shoot beetle. In addition, APHIS will reduce its participation with international organizations and other Federal agencies, the States, and universities to conduct operational projects involving the release and establishment of natural enemies for leafy spurge, diffuse and spotted knapweed, Colorado potato

beetle, and Russian Wheat Aphid (RWA). Specifically, these projects involve the mass production in the field of natural enemies of Leafy Spurge and knapweeds, employing natural enemies of the Colorado potato beetle in the Red River Valley of North Dakota and Minnesota, and structured releases and establishment evaluation of RWA natural enemies to evaluate their economic impact. Regarding the sweetpotato whitefly, the Agency would reduce its data gathering activities on parasitization rates and the number of surveys conducted to evaluate introduced natural enemies. Finally, APHIS would release fewer natural enemies into cultivated fields, plantings of ornamentals, and greenhouses.

Question. Please provide funding history for sweetpotato whitefly control during the last three fiscal years, and a projection for FY 96 funding for this activity.

Answer. The information follows:

SWEETPOTATO WHITEFLY CONTROL OBLIGATIONS (dollars in thousands)			
FY 1993 (act.)	FY 1994 (act.)	FY 1995 (est.)	FY 1996 (est.)
2,583	3,460	2,398	2,012

NATIONAL POULTRY IMPROVEMENT PROGRAM

It is my understanding that the National Poultry Improvement Plan is currently operating on a budget of \$12 million, with 62% of the cost of the program paid by the poultry industry, 36% by individual states and 2% by USDA.

Question. How can APHIS put more emphasis on this highly successful program in the future?

Answer. The success of the National Poultry Improvement Plan (NPIP) has resulted in the virtual elimination of pullorum and typhoid diseases from the commercial poultry industry. Death and condemnation losses due to chronic respiratory disease caused by mycoplasmosis have also been effectively controlled in the turkey and chicken meat industry. This program provides for efficient, low-cost movement of poultry products with minimal restrictions. The virtual elimination of these economically important diseases has benefited our poultry breeders in developing their export markets.

APHIS can put more emphasis on this program in the future by conducting public media campaigns to promote the program and its success, including issuing press releases and preparing informational brochures. These public campaigns should further enhance the program's credibility in the export market place.

Question. This program has been regarded by the poultry industry as highly effective. At one time this program had a line-item in the APHIS budget. Why was the line-item eliminated? What is the proposed funding level for this program in FY 96?

Answer. The NPIP line-item was eliminated in FY 1994, but the program and its related funding were merged into the newly created Animal Health Monitoring and Surveillance (AHM&S) line-item. The AHM&S line-item was created to ensure that animal disease surveillance and detection, emergency disease preparedness and response, animal health monitoring, and epidemiological delivery would continue after successful completion of the major animal disease eradication programs. In addition, the AHM&S line-item strengthens APHIS' infrastructure by combining the surveillance portions of the brucellosis, pseudorabies, and tuberculosis programs and the animal disease detection, NPIP, poultry diseases, swine health protection, and the animal disease portion of the miscellaneous plant and animal disease programs. The proposed funding level for the NPIP portion of this program in FY 1996 is approximately \$240,000, approximately the same amount for the past several years.

QUESTIONS SUBMITTED BY SENATOR BURNS

MEXICAN HASS AVOCADOS

Dr. King you are aware that avocados are a \$1 billion industry. You are also aware, I am sure, that you understand that the 6000 growers in California and Florida growers are concerned about the advanced Notice of Proposed Rulemaking issued by the Department late last year. The ruling would allow for the importation of Mexican Hass avocados into 19 northeastern states.

It is understood that there are comments by reputable personnel, retired from APHIS and ARS, that disagree with the proposed rule making. It is their belief that this action will threaten the domestic industry.

Question. Will you give me your assurance that the Department will require Mexico to provide scientifically credible data before you proceed further with this rulemaking?

Answer. We continue to assure concerned stakeholders, including members of Congress, State, and industry officials, that any decision to propose changes to our current requirements would be based on a full range of scientific data, which indicated that importation of avocados would not compromise the health of U.S. crops.

Question. Will you give me your assurance that the Department will not move forward until there is agreement on the quality of the science involved?

Answer. We agree that, before publishing the proposal to allow entry of Mexican avocados, we must be convinced that the multiple mitigatory measures taken by the Mexican growers and agricultural officials, together with our own inspections, adequately address any potential pest risks posed by these products.

If an evaluation of Mexican research and pest survey data indicates the data are inadequate, we will insist that additional information be collected under strict scientific protocols before allowing Mexican avocados into the United States.

Question. Understanding that there is limited importation, history proves that there is no effective way to prevent transshipment to the areas in question, California and Florida. Since it would be labor intensive and expensive to police this process, can you describe to me how APHIS will pay for this rulemaking?

Answer. If we were to proceed under the Mexican proposal, APHIS would monitor the phytosanitary conditions of Mexican avocado orchards and packing house conditions through cooperative, trust fund agreements. APHIS would incur no cost. Mexican producers already pay for APHIS personnel to clear other agricultural produce. We would have fully qualified Plant Protection and Quarantine Officers overseeing Mexican inspection activities. Although APHIS does not monitor interstate movement of produce, it does, when indicated, require other control mechanisms such as requiring shipments to move under U.S. Customs bond, USDA Limited Permits, and package/container markings which list the allowable States for U.S. distribution.

The Agricultural Marketing Service's (AMS) Fruit and Vegetable Division helps to enforce APHIS' limited distribution requirements on interstate movement. AMS has employees stationed in all the major produce terminals throughout the United States. They have agreed to notify APHIS when they observe violations of limited distribution restrictions on produce, such as avocados.

ANIMAL DAMAGE CONTROL

During this administration, the livestock industry has been confronted by Rangeland Reform, grazing fee increases, the introduction of Canadian Wolves, loss of property rights in the name of endangered species protection, loss of the wool incentive and now a reduction in the budget for animal damage control. I am greatly concerned with this, since the number one industry in Montana is agriculture. The Administration with the cooperation of, Animal and Plant Health Inspection Service proposed a reduction in the budget for animal damage control of \$6.3 million.

Question. How did APHIS arrive at the \$6.3 million reduction for the ADC program?

Answer. Of the \$6,378,000 proposed reduction for ADC operations in FY 1996, \$3,878,000 is for transfer to the APHIS contingency fund to better prepare the Agency for rapidly addressing emergency program needs. We have proposed additional reductions in several programs which offer greater flexibility in meeting eradication targets, or which have the potential to attract increased cooperator support. The additional proposed reduction of \$2,500,000 for ADC operations would help provide for essential increases for APHIS programs which do not offer the same level of target flexibility or cooperator support. By offsetting program increases with program decreases, Federal deficit reduction efforts are not compromised.

Question. How will this reduction impact the livestock producers in Montana and across the nation?

Answer. If an across-the-board action is necessary in addition to the proposed closing of State-wide ADC programs, district offices and the termination of aerial predator control, wolf control in Minnesota, and blackbird hazing in the Dakotas to achieve the proposed \$6.4 million reduction for FY 1996, the Montana ADC program

would be affected. With the across-the-board reduction, there would be reduced direct control assistance; Montana would not receive aerial predator control. While direct control programs would terminate in the States slated for closure, technical assistance would still be available to producers experiencing wildlife conflicts.

Question. Last year the wool industry lost the wool incentive payment. Does APHIS now expect the sheep industry to assume the cost of animal damage control, while the trend for wool and sheep prices is continuing to drop?

Answer. The Agency is aware of the cost-price pressures facing the sheep industry. However, it must rely on States and private entities to assume greater responsibility for activities involving direct control of damage caused by coyotes, beavers, blackbirds, and other species which damage the agricultural community. However, APHIS will still provide technical assistance and a reduced level of direct control assistance to livestock producers.

Question. Secretary Babbitt, with the Fish and Wildlife Service have shoved the introduction of the Canadian Gray Wolf in the faces of western states and their livestock producers. Did APHIS consider the impact of the introduction of this predator when the \$6.3 million was made in the ADC budget?

Answer. Although APHIS was not involved in the decision by the Fish and Wildlife Service (FWS) to reintroduce wolves, APHIS did consider the impact in the budget formulation process. In the past, FWS has provided APHIS with funding to handle wolf-livestock conflicts in Montana, Idaho, Wyoming, and Washington. Additionally, FWS has given landowners the authority to remove wolves killing or harassing livestock in the wolf reintroduction areas.

Question. I understand that there is funding coming to ADC for non-federal cooperators, and that these funds are increasing. Can you tell us how much is currently being received?

Answer. APHIS currently has cooperative agreements for ADC control activities with 47 States. Cooperative agreements include any agreement with the State to conduct ADC activities, including those States making in-kind contributions such as office space or equipment. The following table contains the amount of Federal appropriated funds for FY 1995. The amount of non-Federal contributed funding for FY 1995 is incomplete; therefore, we are providing non-Federal funding for FY 1994:

	FY 1995 <u>Appropriated</u>	FY 1994 <u>Non-Federal</u>
Alabama.....	163,000	82,454
Alaska.....	50,000	312,996
Arizona.....	434,384	262,517
Arkansas.....	259,690	0
California.....	1,526,097	2,047,100
Colorado.....	765,524	256,545
Connecticut.....	14,992	0
Delaware.....	10,580	0
District of Columbia.....	10,580	0

Florida.....	155,200	32,877
Georgia.....	103,800	109,665
Hawaii.....	95,000	655,712
Idaho.....	905,819	359,101
Illinois.....	117,050	103,687
Indiana.....	104,387	11,205
Iowa.....	54,235	543
Kansas.....	75,000	0
Kentucky.....	118,663	82,155
Louisiana.....	362,400	99,758
Maine.....	135,700	90,238
Maryland.....	84,640	41,370
Massachusetts.....	73,086	29,558
Michigan.....	105,487	8,424
Minnesota.....	246,500	2,579
Mississippi.....	527,800	364,651
Missouri.....	133,539	19,783
Montana.....	987,759	538,512
Nebraska.....	372,174	223,300
Nevada.....	791,172	633,775
New Hampshire.....	186,900	57,257
New Jersey.....	105,784	240,904
New Mexico.....	1,175,550	919,100
New York.....	119,634	31,621
North Carolina.....	135,850	209,437
North Dakota.....	748,721	311,606
Ohio.....	148,900	44,859
Oklahoma.....	766,152	716,042
Oregon.....	943,788	713,003
Pennsylvania.....	83,116	0
Rhode Island.....	5,622	0
South Carolina.....	113,611	210,000
South Dakota.....	300,000	827,248
Tennessee.....	223,111	378,232
Texas.....	2,287,820	5,210,498
Utah.....	962,067	707,445
Vermont.....	50,000	40,718
Virginia.....	222,210	97,245
Washington/Guam....	566,183	1,321,090
West Virginia.....	97,387	90,928
Wisconsin.....	525,500	855,865
Wyoming.....	971,317	584,461
Total.....	\$19,523,481	\$19,936,064

Question. Is there an underlying purpose to the \$6.3 million reduction in ADC funds, such as meeting the requests of special interest environmental groups?

Answer. Although APHIS is open to information exchange with all interested parties in order to improve program methods and effectiveness, and to remain sensitive to and aware of the efforts of other groups, the proposed reduction for the ADC operations program is based solely on immediate Agency requirements, funding limitations, and program flexibility.

Question. Did APHIS consult with the industry, state government or anyone before recommending the \$6.3 million reduction?

Answer. Industry representatives, State governments, and local cooperators were not consulted regarding the proposed reduction in funding for ADC operations. The decision was based on overall funding priorities and APHIS emergency preparedness needs.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

BOLL WEEVIL

Question. What are the funding levels for the various boll weevil programs for 1994, 1995, and 1996 in various regions of the country?

Answer. The information follows:

Region	1994	1995	1996
Central Eradication and Suppression	846,000	4,268,000	3,350,000
Southeast Eradication	11,420,000	11,364,000	5,900,000
Southwest Eradication	960,000	523,000	250,000

Question. In what areas do you expect to see program expansion? In Arkansas, concern has been expressed that budget constraints may limit the federal investment in the eradication program by the time it reaches Arkansas and, consequently, Arkansas producers may actually receive a lower level of agency assistance than other states.

Answer. The program expanded into northern Alabama, middle Tennessee, and eastern Mississippi late in FY 1994. In FY 1995, the program expanded into the Southern Rolling Plains and the Lower Rio Grande Valley of Texas. Further expansion, dependent upon appropriation and grower levels of contribution, is planned for FY 1996 into Louisiana, central Mississippi, southwest Tennessee, and the southern/Coastal Bend areas, central Rolling Plains, and Saint Lawrence in Texas.

Question. Can you address this problem and indicate what steps are being taken to help overcome this apparent "equity" issue?

Answer. In recent years, the National Cotton Council has held regular meetings allowing growers to revise the boll weevil eradication plan. As a result of these meetings, cotton growers proposed an accelerated plan that would achieve boll weevil eradication 21 years ahead of APHIS' earlier schedule. In a meeting held in February 1995, growers agreed that a revision to the traditional 30 percent federal cost share was necessary to continue the accelerated eradication plan that they proposed. The federal cost share is contingent on the level of federal funding available

and the growers willingness to wait for program expansion. Limited federal funding and increased grower demand for program expansion into new areas have forced APHIS, in agreement with the National Cotton Council, to revise the traditional cost share. Federal funding assistance in the new expansion areas is determined by the appropriation level. Cotton grower leaders in all the remaining infested areas (Arkansas, Louisiana, Missouri, Oklahoma, Texas, and portions of Mississippi and Tennessee) are aware of the potential federal funding shortfalls and agreed to cover a higher portion of the cost of the eradication program if absolutely necessary. However, cotton growers will have the opportunity to decide on whether to participate in the program, with reduced federal contribution, when they vote for referenda in their particular area.

QUESTIONS SUBMITTED BY SENATOR KOHL

IMPORT/EXPORT

I have been trying for over a year now to get an APHIS position established in Hungary to deal with what I believe to be unjustified trade barriers that have been imposed on U.S. exports of bovine genetic products to Eastern Europe.

It has been my understanding that our potential bovine genetic exports to Eastern Europe would be far greater if we were better able to confront certain barriers that have been imposed, ostensibly on the basis of health and safety. It is also my understanding that APHIS has recommended that an additional APHIS position be added in Eastern Europe to better address these trade barriers.

In the past, when I have asked APHIS about the status of this effort, I have been told that you are working on it. I am now hearing that the State Department has put a halt to the plan to add an additional APHIS position in the U.S. embassy in Hungary, but that there may be plans to add an APHIS position in Vienna instead.

Question. I would like to know exactly what is the status of this plan? If no decision has been made yet, could you tell me in which agency the final decision will be made?

Answer. APHIS is actively addressing issues concerning trade barriers in plant and animal products. We recommended Hungary as the best location from which to handle Eastern European trade barriers. This February, the United States ambassador to Hungary rejected our request to place an APHIS representative in that country. The embassy recognized that we had strong justification for a position in Hungary; however, the embassy is undergoing a strong downsizing operation as are many State Department delegations. We had to compete with other Federal Government operations in that country for a place in a shrinking U.S. delegation. The United States embassy in Austria, however, expressed an interest in housing an APHIS representative. We expect to open an office in Vienna this summer with clearance by the embassy in Austria. We already have a veterinarian chosen to represent APHIS-related issues in Vienna.

Since the State Department is the official government representative in international posts, it must make the final decision on new postings for overseas APHIS personnel.

GRAIN INSPECTION, PACKERS, AND STOCKYARDS ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR COCHRAN

PACKER CONCENTRATION STUDY

Question: In fiscal year 1992, the Congress provided \$500,000 to the Packers and Stockyards Administration to study concentration in the red meat packing industry. Would you please update us on the status of this study?

Answer: Seven projects are being completed by contractors as part of the study. The Packers and Stockyards program plans to complete a summary report on six of the projects this summer and a final report on the seventh project by the end of the year.

Question: How much has been spent to date on this study and what is the estimated total cost of this study?

Answer: The cost of the six contracts is \$506,996, of which \$211,188 has been paid. In addition, the Economic Research Service has been paid \$127,000, bringing the total commitment to \$633,996.

FEE PROPOSALS

Question: The fiscal year 1996 budget includes three legislative proposals to require beneficiaries of services provided by the Grain Inspection, Packers and Stockyards Administration to pay the costs of these services. User fees are proposed: (1) to recover the federal costs of developing, reviewing, and maintaining official U.S. grain standards (estimated to save \$3.576 million); (2) to impose licensing fees for the registration of market agencies and dealers (estimated to save \$12.719 million); and (3) to establish a "dealer trust" whereby livestock inventories and accounts receivable due from the sale of livestock would be held in trust for unpaid cash sellers when a dealer fails to pay for livestock (estimated to save \$179,000). Has the Administration submitted its legislative proposals to charge fees for grain standardization activities, to establish registration licensing fees, and to establish a "dealer trust" to the Congress?

Answer: It is anticipated that the proposed legislation will be sent to Congress within forty-five days.

Question: What level of fees would a user be required to pay under these proposals?

Answer: It is currently estimated that \$3.6 million will be needed to cover the costs of developing and revising standards. Approximately \$300,000 of this total is attributed to standards developed under the Agricultural Marketing Act of 1946. The remaining \$3.3 million is attributed to developing and revising grain standards under the United States Grain Standards Act. Based on fiscal year 1994 revenue data, fees under the Agricultural Marketing Act will increase by 3.7 percent and fees under the United States Grain Standards Act will increase by 14.7 percent. Basic hourly inspection fees at export, for example, would increase from \$31.50 to \$36.10 per hour.

The proposed licensing fees will be based on a standard licensing fee for each entity operating subject to the Packers and Stockyards Act, with additional fees for each branch and each type of operation with minimum and maximum fees. The minimum fee will likely be about \$600 to \$750 and the maximum will likely be between \$5,000 and \$7,500.

SHIFT FROM STANDARDIZATION TO METHODS DEVELOPMENT

Question: The fiscal year 1996 request proposes to shift \$1.0 million from standardization activities to methods development activities for economic and market analyses related to grain quality measurement and methods development activities. What will be the impact of the \$1.0 million reduction in funding for grain standardization activities as a result of this proposal?

Answer: In essence there is no impact as the proposal represents a shift, not a reduction, of activities. In the 1995 budget, costs associated with methods development were limited solely to technical research. Research was viewed as benefiting a very diverse group from whom user fees could not be directly or reasonably collected. Upon closer review, we have determined that research will not, in and of itself, serve the needs of American agriculture. To ensure that new techniques add value to the U.S. grain marketing system, methods development must also include the costs of gaining an accurate understanding of the economic importance and value of grain quality measurements. Understanding how the market uses specific quality measurement information is as important as understanding how the actual testing methodology functions. For example, the Agency has developed new technology to measure wheat hardness. It is planned to use this technology to establish an objective wheat classification system. This, in itself, has great merit; however, the new technology also offers equally great promise as a predictor of the specific milling value of a shipment of wheat. Producers, handlers, millers, bakers, and ultimately consumers will benefit from the technology if the market is allowed to identify and segregate wheat based on the predicted milling value. Understanding how technology can best fulfill its potential, educating the market about its benefits, and finally, assessing the impact of the technology on the grain marketing system, must all be considered integral parts of a truly effective methods development process.

Shifting these activities from standardization to methods development will facilitate or assist the market in meeting the future quality needs of both domestic and foreign buyers of U.S. cereals and oilseeds. New varieties tailored to meet specific processing or consumer needs are being developed at an ever increasing rate. Providing industry (producer to exporter) with the tools necessary to identify these special traits and to determine the market value is essential if the U.S. is to remain a leader in the very competitive world grain market.

OFFICE CLOSURES

Question: The budget indicates that the Grain Inspection, Packers and Stockyards Administration (GIPSA) will consolidate seven grain inspection offices and one Packers and Stockyards field office in early 1995 to reduce costs and improve service delivery. What is the status of this office consolidation?

Answer: Since the beginning of FY 1995, the grain inspection program reduced their field locations from 31 to 23 (13 field offices, 8 suboffices, and 2 Federal/State offices). The Packers and Stockyards Portland office was consolidated with its Sacramento office on October 1, 1994.

Question: Which offices are being closed and how will this consolidation improve service delivery?

Answer: Effective October 30, 1994, the Beaumont and Corpus Christi, Texas field offices were converted to suboffices and the Houston, Texas field office was closed and program responsibilities were transferred to the League City, Texas field office. League City now serves as the single location that manages all Agency export operations in Texas.

Effective January 1, 1995, the Indianapolis, Indiana and West Memphis, Arkansas suboffices and the Omaha, Nebraska; Peoria, Illinois; and Plainview, Texas field offices were closed and program responsibilities were transferred to other existing field offices.

Effective March 6, 1995, the Belle Chasse, Louisiana field office was closed and consolidated with the existing Destrehan, Louisiana field office as the first phase in the New Orleans, Louisiana consolidation. Effective April 2, 1995 the Destrehan and Luthier, Louisiana field offices will be closed and consolidated into the New Orleans field office in the final phase of the New Orleans consolidation.

The consolidation will not only save money, but will improve the performance of the official system, contain the costs to users of the system, and enhance service delivery by providing quality service that meets the needs of the grain industry. There will be no negative impact on customers requesting official inspection service. The consolidation actions will help contain operating expenses which are reflected in the level of inspection and weighing user fees.

Effective October 1, 1994, the Packers and Stockyards program consolidated the responsibilities of its Portland, Oregon office with the Sacramento, California regional office.

Question: How will this office consolidation reduce costs?

Answer: Consolidating and closing offices will result in a reduction in the overall cost for administrative activities such as rent, utilities, and other expenses involved in maintaining an office and will allow for a more cost-effective use of our resources.

Question: What cost savings resulting from this consolidation are reflected in the fiscal year 1996 budget?

Answer: During FY 1994, the grain inspection program estimated that restructuring its field operations will result in an estimated \$1.3 million savings in the trust fund two years after implementation.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

PACKER CONCENTRATION STUDY

Question: In fiscal year 1992, Congress appropriated \$500,000 to the Packers and Stockyards Administration to study concentration in the red meat packing industry. What is the status and project budget for the study?

Answer: Seven projects are being completed by contractors as part of the study. The Packers and Stockyards program plans to complete a summary report on six of the projects this summer and a final report on the seventh project by the end of the year.

The cost of the six contracts is \$506,996, of which \$211,188 has been paid. In addition, the Economic Research Service has been paid \$127,000, bringing the total commitment to \$633,996.

Question: I note in your written statement that you are working on the problem related to Soft Red Winter Wheat test weights. I have heard from a number of producers in Arkansas who feel they are being unfairly penalized under current standards when, in fact, there is no real basis for distinguishing wheat that tests at 60 pounds per bushel and a test weight of 58. Can you expand on what the agency is doing in that regard?

Answer: GIPSA initially reviewed available data and concluded that insufficient data existed to identify the advantages and disadvantages of changing the test weight limits of the official U.S. standards for wheat as requested by the Arkansas producers. GIPSA then commissioned the Economic Research Service (ERS) to study and determine the economic importance of test weight in soft red winter wheat. ERS began to collect data from the 1986 through 1993 crop years. In January, ERS made presentations of their research at the Grain Quality Workshop in Kansas City, the North American Wheat Growers (NAWG) convention in Dallas, and at a meeting of the Arkansas Association of Wheat Growers. ERS also presented the latest data collected at a special NAWG meeting held in Washington, D.C. in March. A complete study is expected in April 1995. The final ERS analysis of this situation will provide producers, millers, and GIPSA with the necessary data to move forward on this issue.

AGRICULTURAL MARKETING SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

ORGANIC CERTIFICATION PROGRAM

Question. The fiscal year 1996 request for the Agricultural Marketing Service (AMS) includes an increase of \$556,000 and an additional four staff years to continue implementation of the organic certification program. What total amount of funding and number of staff years does AMS propose to allocate to the organic certification program in fiscal year 1996?

Answer. AMS proposes to allocate \$1.1 million and eight staff years to the organic certification program in fiscal year 1996. In addition to compensating employees, these funds will be used to train program personnel, evaluate and monitor state and private programs, and administer the full implementation of the program.

Question. When do you expect to establish the national minimum organic standards and accreditation program required by the Organic Food Production Act of 1990?

Answer. We are planning to implement the program during fiscal year 1996, if the final rules are in place in sufficient time to allow for phasing in the requirements. We did not receive recommendations for important parts of the program from the National Organic Standards Board until August 1994. These recommendations did not include the list of allowed synthetics, or prohibited natural substances to be used in organic production and processing. The Board will be meeting in April and again early this fall to complete its National List recommendations. The National List is an important part of the total organic program. It has been difficult to obtain volunteer scientific reviewers to provide information on these materials that can be used by the Board to make recommendations. We are working to develop the list by reviewing over 150 substances and are issuing a notice offering other individuals and organizations the opportunity to petition to have additional substances considered. In the meantime, we are developing proposed rules for accreditation and standards based on the recommendations we have received. We plan to publish part of the proposed rule this summer and the entire accreditation program this fall. The Board will be providing recommendations on the time needed by producers to use up existing labels and materials previously allowed, obtain sources of organic feed, and to accommodate the stages of the crop year.

PESTICIDE RECORDKEEPING

Question. What amount of this increase is to establish federal monitoring programs in those states not willing to enter into cooperative programs with AMS?

Answer. AMS believes there will be approximately sixteen states and two U.S. territories which will need to be monitored through a Federal program. We estimate it will cost approximately \$1.7 million to establish a Federal monitoring program in these states and territories.

Question. Why are some states not willing to enter into such agreements?

Answer. There are several reasons states have not been willing to enter into a cooperative program with AMS. Some states have indicated that they would need to hire additional staff for the program and have expressed a reluctance to hire without the assurance of long-term funding to support new staff positions. Other states are concerned about potential adverse reactions from their certified private applicators, mainly farmers, to State

inspectors being involved in another regulatory activity, especially one which is Federal. In addition, some states have expressed a willingness to enter into a cooperative agreement with AMS, but since their State legislative bodies meet every two years, it will take additional time to get approval to move forward with a cooperative program.

Question. What is the cost of establishing a federal monitoring program in a state versus the state establishing a program through a cooperative agreement with AMS?

Answer. Generally, States can monitor a representative sample of certified private applicator's records through a cooperative agreement with AMS for approximately \$45,000. This amount fluctuates depending on the size of the State and the geographical distribution of the State's pesticide inspectors. In contrast, the cost of establishing a Federal program to monitor a representative sample of certified private applicator's records in a State would be approximately \$100,000. The major cost differences are in personnel, travel, and overhead. State agencies have proven that they can carry out the inspections more cost-effectively by combining pesticide record inspections with their normal conduct of other pesticide enforcement activities within the State.

CENTERS OF EXCELLENCE

Question. The fiscal year 1996 request for the Agricultural Marketing Service (AMS) requests an increase of \$1.050 million for a Center of Excellence in World Food Distribution at Prairie View A&M University and three collaborating Texas A&M system universities. What amount of AMS funding is being spent to support the Center of Excellence in World Food Distribution in fiscal year 1995?

Answer. AMS is spending \$150,000 for the Center of Excellence in World Food Distribution during fiscal year 1995.

Question. Would you please describe more specifically how the \$1.050 million requested in fiscal year 1996 for the Center of Excellence in World Food Distribution will be spent?

(The information follows.)

Center of Excellence FY 1996 Proposed Expenditures

Cost Category	Prairie View A&M	Texas A&M Kingsville	Texas A&M Intl	Texas A&M Univ.	Total
Personnel Costs	\$312,350	\$121,000	\$93,600	\$31,200	\$558,150
Equipment	41,700	6,000	92,500	5,000	145,200
Supplies	18,150	3,000	2,000	0	23,150
Travel	50,000	8,000	3,000	0	61,000
Publication Costs	9,500	3,000	4,000	1,000	17,500
Student Support	75,450	30,000	15,000	15,000	135,450
Other	46,850	20,000	29,700	13,000	109,550
Total	554,000	191,000	239,800	65,200	1,050,000

Question. The budget justification indicates that, in addition to AMS funding, four other USDA agencies are providing support for the Center of Excellence in World Food Distribution. What total funding support is USDA providing for the Center in fiscal year 1995? What is the total level of USDA support proposed for fiscal year 1996?

(The information follows.)

Contributions to the
World Food Distribution Training Center

USDA Agency	FY 1995	FY 1996
AMS	\$150,000	\$1,050,000
CFSA	50,000	--
ERS	10,000	--
FAS	50,000	--
FCS	50,000	--
Total USDA	\$310,000	\$1,050,000

The funding requested by AMS for fiscal year 1996 constitutes the total financial support provided by USDA that fiscal year.

USER FEES FOR COST OF STANDARDIZATION ACTIVITIES

Question. The fiscal year 1996 budget includes a legislative proposal to allow AMS to retain the funds collected from user fees and eliminate appropriated funding for standardization activities. The budget justification indicates that this would eliminate the need to transfer assessments to Treasury, which currently complicates program administration and curtails AMS' flexibility in setting fees.

Has this legislative proposal to allow AMS to retain the funds from standardization user fee collections and to eliminate the appropriation for standardization activities been submitted to the Congress?

Answer. Yes, the Secretary submitted a draft bill "To recover costs of establishing standards for agricultural products" to Congress March 7, 1995.

Question. Why is legislation being proposed to allow AMS to retain these fees? Why can't you accomplish this with a change in the appropriations language to allow the fees generated to be credited to the appropriation as offsetting collections and be available until expended.

Answer. The Agricultural Marketing Act of 1946 directs the Secretary "To develop and improve standards of quality, condition, quality, grade and packaging, and recommend and demonstrate such standards in order to encourage uniformity and consistency in commercial practices." However, the Act does not authorize the Secretary to assess user fees for these activities as it does for grading and certification services. Although we believe a change in the authorizing legislation is desirable in this case, we would not object to having our request enacted through the appropriations process.

Question. What flexibility will AMS gain in setting fees under this legislative proposal that it does not have now?

Answer. Under the current system, AMS collects fees for standardization activities with its grading and certification fees, then transfers collected fees to the Treasury General Fund to reimburse the cost of the standards program. We believe this process distorts the overall budget--the amount of tax dollars needed to finance government operations. Since the cost of standards is already covered by fees, we propose to eliminate the standards appropriation and lessen the need for taxes. However, we need the legislative change allowing us to charge fees for and retain funds for standardization activities.

OFFICE CLOSURES

Question. The budget indicates that the Agricultural Marketing Service (AMS) proposes to close eight field offices in 1995. Are you currently in the process of closing these offices?

Answer. Yes, of the offices listed in the budget, we have already closed two and are preparing to close the remaining six before the end of the fiscal year.

Question. Which offices are being closed?

Answer. As we indicated in our budget, we are closing the following eight field offices in fiscal year 1995.

Cotton Grading	Altus, OK
Cotton Grading	El Paso, TX
Cotton Standardization	Clemson, SC
Fresh Fruit and Vegetable Grading	Sacramento, CA
Fresh Fruit and Vegetable Grading	Glen Ellyn, IL
Fresh Fruit and Vegetable Grading	Falls Church, VA
Livestock and Grain Market News	West Fargo, ND
Poultry Market News	Edison, NJ

As we continue our efforts to improve operational efficiency, we have decided to close an additional seven offices. The first is a Meat Grading field office in Arlington, Texas.

The remaining six are Poultry Grading field offices which we are closing as a result of the transfer of our Egg Products Inspection Program to the Food Safety and Inspection Service in June 1995. They represent previously shared space between our voluntary grading program and the mandatory egg products inspection program. The offices follow:

Poultry Grading	Des Moines, IA
Poultry Grading	Denver, Colorado
Poultry Grading	West Lafayette, IN
Poultry Grading	Augusta, ME
Poultry Grading	Valrico, FL
Poultry Grading	Columbia, SC

Question. What are the savings from these office closures being achieved in each of fiscal years 1995 and 1996?

Answer. As a result of these office closures, we anticipate savings of \$869,233 in fiscal year 1995 and \$2,040,500 in fiscal year 1996.

SUNFLOWER AND COTTONSEED EXPORTS

Question. The budget requests a change in the appropriations language to put a cap of "no more than \$23.9 million" on the use of section 32 funds for the promotion of sunflower and cottonseed oil exports. Is this the maximum amount of fiscal year 1995 funding

permitted for these export subsidy programs under the GATT Uruguay Round agreements?

Answer. The GATT Uruguay Round agreement does not specify the amount of export subsidy funding allocated exclusively to the promotion of sunflower and cottonseed oil exports. Rather, under the terms of the agreement, the United States can make available a maximum of \$53 million for total vegetable oil subsidies during fiscal year 1996. The Foreign Agricultural Service has allocated 55% of the funding to the Export Enhancement Program and 45% to the Sunflower and Cottonseed Export Program, based on historical utilization of the programs.

SUBCOMMITTEE RECESS

Senator COCHRAN. Thank you very much for being here. This will conclude this hearing.

Our next hearing will be a week from today, April 5, 10 a.m., in this same room. At that time, we will hear from witnesses from the Department on the budget request for research, education, and economics programs.

Until then, the subcommittee is in recess.

[Whereupon, at 12:06 p.m., Wednesday, March 29, the subcommittee was recessed, to reconvene at 10:06 a.m., Wednesday, April 5.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

WEDNESDAY, APRIL 5, 1995

**U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, DC.***

The subcommittee met at 10:06 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.
Present: Senators Cochran, Bumpers, Harkin, and Johnston.

DEPARTMENT OF AGRICULTURE

**STATEMENT OF FLOYD P. HORN, ACTING UNDER SECRETARY, RE-
SEARCH, EDUCATION, AND ECONOMICS**

ACCOMPANIED BY MICHAEL L. YOUNG, BUDGET OFFICE

AGRICULTURAL RESEARCH SERVICE

STATEMENT OF R.D. PLOWMAN, ADMINISTRATOR

**COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION
SERVICE**

STATEMENT OF WILLIAM CARLSON, ACTING ADMINISTRATOR

ECONOMIC RESEARCH SERVICE

STATEMENT OF JOHN C. DUNMORE, ACTING ADMINISTRATOR

NATIONAL AGRICULTURAL STATISTICS SERVICE

STATEMENT OF DONALD BAY, ADMINISTRATOR

OPENING REMARKS

Senator COCHRAN. The committee will please come to order. We are pleased to continue our hearings on the fiscal year 1996 budget request of the administration. Today, we are reviewing specifically the requests for the Agricultural Research Service; the Cooperative State Research, Education, and Extension Service; the Economic Research Service; and the National Agricultural Statistics Service.

Our witnesses this morning are Floyd Horn, who is Acting Under Secretary for Research, Education, and Economics; R.D. Plowman, Administrator, Agricultural Research Service; William Carlson, Acting Administrator, Cooperative State Research, Education, and Extension Service; John C. Dunmore, Acting Administrator, Eco-

nomie Research Service; Donald Bay, Administrator, National Agricultural Statistics Service; and Michael L. Young, Office of Budget and Program Analysis of the Department of Agriculture.

Let me welcome all of you and express my appreciation to you for being here and cooperating with our effort to review and understand the budget request submitted by the Department of Agriculture for these activities.

I am also advised that Dr. Essex Finney is in the audience today, Associate Administrator of the ARS, who retired this week after 32 years of career service. I appreciate very much the opportunity of working with Dr. Finney over the years and I want to thank him for his fine service at the Department of Agriculture. We welcome him and congratulate him for his career of distinction with the Department. [Applause.]

Let me invite the Acting Under Secretary, Dr. Horn, to proceed with whatever statement or comments he would like to make. We do have your prepared testimony and we appreciate very much the witnesses preparing statements for us. We will include the statements in their entirety in the hearing record, and we would ask you to make whatever summary comments you would care to at this time. You may proceed.

STATEMENT OF FLOYD HORN, ACTING UNDER SECRETARY

Dr. HORN. Thank you, Mr. Chairman.

First of all, let me introduce all our folks here. To my far left is Mike Young who is representing the Budget Office of the Department of Agriculture. Next to me on the left is Dr. Dean Plowman, Administrator of the Agricultural Research Service.

To my immediate right is Dr. Bill Carlson, Acting Administrator, Cooperative State Research, Education, and Extension Service; and Mr. John Dunmore, Acting Administrator, Economic Research Service; and Mr. Don Bay, Administrator of the National Agricultural Statistics Service.

Mr. Chairman, I appreciate the opportunity to provide you with an overview of the research, education, and economics programs of the Department of Agriculture. We have come before you this morning to discuss the fiscal year 1996 budget proposals in detail, and with your permission I will skip some of the things in the written testimony. As you indicated those are available for the record, so I will abbreviate my comments somewhat here now, making some general remarks about the research, education, and economics mission area, and then discuss the individual budgets from the standpoint of the Under Secretary's office.

BUDGET RECOMMENDATIONS

The budget recommendations for the programs administered by the research, education, and economics [REE] agencies, reflect the major importance these programs have both for the future of the agricultural sector in the U.S. economy and for their support of other mission areas of the Department and other Federal agencies that conduct programs affecting agriculture.

Recommendations also reflect our broadened commitment to all Americans to see that a safe, wholesome, and nutritious food supply will continue to be available at reasonable costs; that agri-

culture will become a positive environmental force; and that the productivity and viability of rural communities will be enhanced as a result of what we do.

We wish to make it very clear that we consider agricultural research and development to be a sound investment, not simply a Government outlay. We wish to remind the committee, through you, that each year the value of the products from the research and development's pipeline far exceed research and development expenditures.

In 1994, food costs as a percent of disposable personal income for U.S. consumers were 11.1 percent. Comparable figures for 1990, 1980, and 1970 were 11.8 percent, 13.5 percent, and 13.9 percent. So we are on the decrease. Increases in agricultural productivity are a primary reason consumer food costs are declining, and this is a fundamental rationale for public spending to support agricultural technology.

Productivity also impacts on international competitiveness, nutrition, conservation, and other important issues facing the United States. The rate and productivity growth in agriculture has outpaced that of most other sectors of the economy. Since 1914, total productivity in agriculture has grown by 300 percent in this country with a growth rate of 1.9 percent per year since the late 1940's. These gains, which reflect public investment in new technology, have enabled U.S. farmers to moderate, not accentuate, adverse environmental impacts of agricultural production.

INVESTMENT IN AGRICULTURAL RESEARCH

Many studies have assessed the rate of return on investment in agricultural research. Estimated returns on investment for basic research are especially high at 74 percent, while returns on all basic and applied research were estimated at 40 percent. Very few can come before you with those kinds of returns on investments.

Science and innovation from REE people and programs have contributed significantly to lower consumer food prices, increased farm productivity, food safety and nutritional value, international competitiveness, rural economic development, and environmental protection. Even as we look for ways to reduce Federal spending to meet current fiscal policy objectives, it is important not to lose sight of the critical importance of maintaining the overall level of technological excellence that supports American agriculture. Without continuing gains in research and development, a low-cost, safe, and nutritious food supply, an efficient, internationally competitive agricultural sector, and a production system that creates minimal impacts on the environment cannot be sustained.

Total funding for the REE agencies in 1996 was estimated at \$1.781 billion, a decrease of about \$60 million from 1995. Within the total there is a reduction for Federal research conducted by the Agricultural Research Service, laboratory closings, and other savings from specific program reductions of \$29 million, and additional savings from administrative costs will enable ARS to meet increases in pay and operating costs and add \$25 million to high-priority projects including integrated pest management, food safety, human nutrition, and improved library information services.

There are several high-priority proposals for construction and renovation at ARS locations, but the total ARS construction and renovation budget is down from fiscal year 1995. Even as there is a proposal to close facilities and/or consolidate projects at other locations, there is a need to invest in Federal facilities necessary to support the research programs of the future.

Within the total Cooperative State Research, Education, and Extension Service budget there is basic support for university research and extension through the formula grant programs. However, there are proposed reductions in selected programs that are less oriented toward broad national interests.

The budget also contains an important recommendation for a 30-percent increase in competitive grants for basic, fundamental agricultural research through the National Research Initiative. In many ways, it is our belief that as fundamental research goes, so will go all of our research and development budget, not only in the Department of Agriculture but perhaps Governmentwide. The National Research Initiative supports agriculture-related work by some of the best scientists in the country, and this program continues to provide tangible evidence of progress in solving real problems of national importance.

With the exception of funding for a facility grant program for the 1890 institutions, funding for facilities at universities is not recommended.

The Department offers several small but high-impact programs designed to form effective working relationships with institutions of higher education. We believe it is important that students from all segments of society know about career opportunities throughout the agricultural sector, and that the programs offered at their colleges and universities provide the training needed for agriculture-related careers. In recent years we have had success with programs offered primarily through the 1862 and 1890 land grant institutions. The 1996 budget includes recommendations to support programs at predominantly Hispanic serving institutions and at native American serving institutions.

INTEGRATED PEST MANAGEMENT

I want to point to one special program we have, and that is integrated pest management. The budget includes funding needed to move ahead on the integrated pest management initiative announced in December 1994 by the Department that involves all research, education, and economic agencies and many other agencies of the Department of Agriculture and external to the Department.

Since the majority of the IPM funding is within research, education, and economics, close cooperation with other USDA agencies, and the EPA in particular, is critical. Under the initiative we will be working closely with local, regional, and State entities and producers to establish program priorities for alternative pest control technologies and areawide pest management projects. The IPM initiative of the Department is designed to take full advantage of the land grant system's close relationships to producers and its responsiveness to their needs. At the same time, Federal scientists bring unique capabilities and research resources to address pest problems on a larger national scale and over a longer period of time.

REORGANIZATION AND STREAMLINING

There is likely to be special interest in reorganization and streamlining. With the newly reorganized Cooperative State Research, Education, and Extension Service, we now have a single agency to provide leadership and financial support for programs carried out at land grant and other universities. In addition to budget savings, these reorganization and streamlining initiatives should result in better program planning and coordination of Federal and State programs. We will present a more united agency budget a year from now than we have today, but the progress we have achieved in several months of reorganization is significant.

With regard to the Economic Research Service and the National Agricultural Statistics Service, we are pleased to have the principal agencies formerly under the Assistant Secretary for Economics as a part of the REE portfolio. We fully appreciate the importance of absolutely reliable and independent economic and statistical information in the performance of the agricultural economy.

We look forward especially and with considerable enthusiasm to contributions from these agencies in the management of our programs in the mission area. We also look forward to continued service to our many customers, including this committee and the Congress, through economic analysis of critical issues.

In terms of staff-year ceilings, the Economic Research Service is more than 25 percent smaller today than it was in 1990. The USDA is ahead of the curve in streamlining Government, and this agency epitomizes the best of program streamlining. The budget recommendation is to maintain current levels of spending in 1996 plus increases needed to cover pay raises and inflation in operating costs.

The National Agricultural Statistics Service plays an important supporting role in several USDA programs like the integrated pest management initiative. Funding recommendations would add funds and broader geographical coverage to the current pesticide use surveys, provide important information on the extent of adoption of IPM practices, and provide information on restricted use pesticides. The increase of \$6.3 million for these activities represents an increase of about 8 percent in the NASS budget.

In summary, we view the program activities of the entire research, education, and economics mission area as a public investment that will enhance the Nation's wealth-creating capacity and security. One in every six jobs in America is in some way tied to the food and fiber industry. Even as we look for ways to reduce Federal spending to meet current fiscal policy objectives, it is important not to lose sight of the critical importance of maintaining the overall level of technological excellence that supports American agriculture and reflects the needs of future generations as well as our own.

If cuts in research and development infrastructure are too deep, it will take a long time to recover, especially in light of the strong linkage between research and education. We remind the committee that virtually every scientist is the product of on-the-job training, and the next generation of scientists depends on the sustained support of this committee and the Congress.

We appreciate the opportunity to appear before you and your interest in our work. We will do our very best to answer questions and provide whatever information the committee needs to proceed with the 1996 budget.

[The prepared statement of Dr. Horn follows.]

PREPARED STATEMENTS

Senator COCHRAN. Thank you very much, Dr. Horn. We have your complete statement, and it will be made part of the record along with the statements of Dr. Plowman, Dr. Carlson, Mr. Dunmore, and Mr. Bay.

[The statements follow:]

PREPARED STATEMENT OF DR. FLOYD HORN

Mr. Chairman and members of the Committee, I appreciate the opportunity to provide you with an overview of the research, education, and economics programs of the Department of Agriculture. With me today are Dr. Dean Plowman, Dr. William Carlson, Mr. Donald Bay, and Dr. John Dunmore, administrators of ARS, CSREES, NASS, and ERS respectively. They have come, with their senior staff to answer, in detail, questions you may have about the fiscal year 1996 Budget. In my statement, I would like to make some general remarks about the REE mission area and then discuss the individual agency budgets from the standpoint of the Under Secretary's office.

The budget recommendations for the programs administered by the Research, Education, and Economics (REE) agencies reflect the major importance these programs have both for the future of the agricultural sector in the U.S. economy, and for their support of other Mission Areas of the Department, and other Federal agencies that conduct programs affecting agriculture.

Recommendations also reflect our broadened commitment to all Americans to see that a safe, wholesome and nutritious food supply will continue to be available at reasonable costs, that agriculture will become a positive environmental force and that the productivity and viability of rural communities will be enhanced as a result of what we do. We wish to make it very clear that we consider agricultural research and development to be a sound investment, not simply a government outlay. We wish to remind the Committee that each year the value of products from the Research and Development "pipeline" far exceeds R&D expenditures.

In 1994, food costs as a percent of disposable personal income for U.S. consumers were 11.1 percent. Comparable figures for 1990, 1980 and 1970 were 11.8 percent, 13.5 percent, and 13.9 percent. Increases in agricultural productivity are a primary reason consumer food costs are declining and this is a fundamental rationale for public spending to support agricultural technology.

Productivity also impacts on international competitiveness, nutrition, conservation and other important issues facing the United States. The rate of productivity growth in agriculture has out paced that of most other sectors of the economy. Since 1914, total productivity in agriculture has grown by 300 percent with a growth rate of 1.9 percent per year since the late 1940's. These gains, which reflect public investment in new technology have enabled U.S. farmers to moderate, not accentuate, adverse environmental impacts of agricultural production.

Many studies have assessed the rate of return on investment in agricultural research. Estimated rates of return on basic research are especially high at 74 percent, while returns on all basic and applied research were estimated at 40 percent. Science and innovation from REE people and programs have contributed significantly to lower consumer food prices, increased farm productivity, food safety and nutritional value, international competitiveness, rural economic development, and environmental protection. Even as we look for ways to reduce Federal spending to meet current fiscal policy objectives, it is important not to lose sight of the critical importance of maintaining the overall level of technological excellence that supports American agriculture. Without continuing gains in research and development, a low cost, safe and nutritious food supply; an efficient, internationally competitive agricultural sector; and a production system that creates minimal impacts on the environment cannot be sustained.

AGRICULTURAL RESEARCH SERVICE

Total funding for the REE agencies in 1996 is estimated at \$1.781 billion, a decrease of about \$60 million from 1995. Within the total there is a reduction for Federal research conducted by the Agricultural Research Service (ARS). Laboratory closings and other savings from specific program reductions of \$29 million and additional savings in administrative costs will enable ARS to meet increases in pay and operating costs and add \$25 million to high priority projects including Integrated Pest Management, food safety, human nutrition, and improved library information services.

There are several high priority proposals for construction and renovation at ARS locations, but the total ARS construction and renovation budget is down from 1995. Even as there is a proposal to close facilities and/or consolidate projects at other locations, there is a need to invest in Federal facilities needed to support the research program of the future.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE

Within the total Cooperative State Research, Education, and Extension Service (CSREES) budget there is basic support for university research and extension through the formula grant programs. However, there are proposed reductions in selected programs that do not serve broad national interests.

The budget also contains an important recommendation for a 30 percent increase in competitive grants for basic agricultural research through the National Research Initiative (NRI). The NRI supports agriculture-related work by some of the best scientists in the country and you will see tangible evidence of progress in solving real problems of National importance.

With the exception of funding for a facility grant program for the 1890 institutions, funding for facilities at universities is not recommended.

The Department offers several small, but high impact programs designed to form effective working relationships with institutions of higher education. We believe it is important that students from all segments of society know about career opportunities throughout the agricultural sector, and that the programs offered at their colleges and universities provide the training needed for agricultural related careers. In recent years we have had success with programs offered primarily through the 1862 and 1890 land-grant institutions. The 1996 budget includes recommendations to support programs at Hispanic serving institutions and Native American serving institutions.

1890 PROGRAMS

We believe there is a special case to be made for Federal support for programs at the 1890 institutions, including the program of grants for facilities. Federal support for agricultural research and extension programs at the 1890 institutions only became significant in 1972, and a modest facility grant program was not available until 1983. Unfortunately, even today, the agriculture research, extension, and teaching programs at the 1890's receive relatively little support from State or other non-Federal sources. Our proposal for a larger facility grant program is only one component of our continuing efforts to strengthen the Department's ties and working relationships with these institutions. In addition there are proposals for a modest increase in the highly successful Research and Teaching Capacity Building Grants program, and additional efforts to develop mutually beneficial partnerships with the 1890 institutions to conduct a wide range of programs and activities. These partnership relationships provide the basis for centers of excellence, which are on-campus entities devoted, in part, to addressing specific USDA agency priorities. Seven such centers have been established to date, and there are proposals for three additional centers in 1996. Administrators from the cooperating agencies will describe these centers in more detail, but I can tell you that in the office of the Under Secretary we are very pleased and proud of our joint programs with the 1890 Institutions.

INTEGRATED PEST MANAGEMENT

The budget includes funding needed to move ahead on the Integrated Pest Management (IPM) initiative announced in December 1994 that involves all REE agencies. Since the majority of the IPM funding is within REE, close cooperation with other USDA agencies and EPA is critical. Under the initiative, we will be working closely with local, regional, and State entities and producers to establish program priorities for alternative pest control technologies and area-wide pest management projects. The IPM initiative is designed to take full advantage of the land-grant sys-

tem's close relationships to producers and its responsiveness to their needs. At the same time, Federal scientists bring unique capabilities and research resources to address pest problems on a larger scale and over a longer period of time.

REORGANIZATION AND STREAMLINING

With the newly reorganized Cooperative State Research, Education, and Extension Service (CSREES), we now have a single agency to provide leadership and financial support for programs carried out at land-grant and other universities. In addition to budget savings, these reorganization and streamlining initiatives should result in better program planning and coordination of Federal and State programs. We will present a more united agency budget a year from now than we have to date, but the progress we have achieved in several months of reorganization is significant.

ECONOMIC RESEARCH SERVICE AND NATIONAL AGRICULTURAL STATISTICS SERVICE

We are pleased to have the principal agencies formerly under the Assistant Secretary for Economics as a part of the REE portfolio. We fully appreciate the importance of absolutely reliable and independent economic and statistical information in the performance of the agricultural economy.

We look forward with considerable enthusiasm to contributions from these agencies in the management of our programs in the REE mission area. We also look forward to continue service to our many customers including this committee and the congress through economic analysis of critical issues.

In terms of staff year ceilings, the Economic Research Service (ERS) is more than 25 percent smaller today than it was in 1990. This agency epitomizes the best of program streamlining. The budget recommendation is to maintain this level in 1996 with increases needed to cover pay raises and inflation in operating costs.

In addition to its basic responsibilities for agricultural statistics, the National Agricultural Statistics Service (NASS) plays an important supporting role in several USDA programs like the Integrated Pest Management initiative. Funding recommendations would add coverage to the current pesticide use surveys, provide important information on the extent of adoption of IPM practices, and provide information on restricted use pesticides. The increase of \$6.3 million for these activities represents an increase of about 8 percent in the NASS budget.

SUMMARY

In summary, we view the program activities of the entire research, education, and economics mission area as a public investment that will enhance the nation's wealth-creating capacity and security. Even as we look for ways to reduce Federal spending to meet current fiscal policy objectives, it is important not to lose sight of the critical importance of maintaining the overall level of technological excellence that supports agriculture and reflects the needs of future generations as well as our own. If cuts in the research and development infrastructure are too deep it will take a long time to recover—especially in light of the strong link between research and education.

I want to reemphasize the importance of Federal support for the programs in the research, education, and economics mission area. We are confident that as our discussions of programs, activities, and budget plans continue, the Committee will share our vision of future program direction. We appreciate the opportunity to appear before you and your interest in our work. We will do our best to answer questions and provide whatever information the Committee needs to proceed with the 1996 Budget.

PREPARED STATEMENT OF DR. DEAN PLOWMAN

Mr. Chairman, and members of the Subcommittee, I am pleased to have this opportunity to represent the Agricultural Research Service and to present our budget recommendations for fiscal year 1996. Mr. Chairman, I would like to first take this opportunity to briefly review the mission and operation of the Agricultural Research Service and then speak to the fiscal year 1996 budget recommendations which you have before you.

ARS MISSION

As the principal scientific research Agency of the U.S. Department of Agriculture, our mission is to develop new knowledge and technology and disseminate information essential to solving technical agricultural problems that are broad in scope and have high national priority. We are a problem-solving Agency that is dedicated to

sustaining a viable food and agriculture economy—to maintaining a quality environment—and ensuring affordable, abundant, safe, high quality food and fiber for the Nation's consumers. At the same time, we want to make sure that our farmers and ranchers and the agricultural industry overall, remain competitive in both the domestic and world markets.

Mr. Chairman, the Agricultural Research Service carries out this vital Federal mission because (1) it's objectives are national or international in scope; (2) it responds to national emergency requirements; (3) the problems it addresses require unique national facilities and (4) because the research it conducts is in the nation's long-range national economic interest. This is research that other public and private institutions cannot or will not do because of the costs involved; the requirement for expensive facilities; the lack of a national network; or because of the long-range, high risk effort required and the uncertainty of pay back.

PROBLEM-ORIENTED UNIQUE FACILITIES

Examples of the unique and expensive facilities required are those such as for exotic animal disease research at Plum Island, NY; National Seed Storage Laboratory at Ft Collins, CO; the cotton processing research at the Southern Regional Research Center in New Orleans; and the ARS cotton ginning laboratories at Stoneville, MS, Lubbock, TX, and Las Cruces, NM. Recent efforts pertaining to sweetpotato whitefly demonstrate our ability to respond quickly to a critical problem calling upon our unique entomology research facilities in Florida, Texas and Arizona. The industrial use research to expand markets conducted mainly in the ARS regional research centers, such as the National Center for Agricultural Utilization Research in Peoria, IL, is an example of long-term, high-risk research that has had a continuous and increasing pay off. Virtually all of the products (including potential new crops) being promoted as part of the new emphasis on alternative uses of agricultural commodities had their genesis in the early ARS industrial use program.

CONTINUITY AND RESPONSIVENESS

ARS also provides continuity of research resources needed to facilitate the development of solutions to the complex problems we investigate. This inhouse research organization has a long-standing track record of leadership and plays a pivotal role in providing focus to the Nation's total agricultural research. ARS plays a national role in agricultural research similar to that which the National Institutes of Health provides for biomedical research nationwide.

ARS's goal is to carry out focused, priority research to address national or broad regional problems. ARS research directs its focus nationally and internationally. Its interests and responsibilities go beyond political and geographical boundaries. It is responsive to the Secretary, the President, other Executive Branch agencies, and the Congress to meet new or expanded needs they deem as high priority. The USDA's inhouse resources—its laboratories, equipment and its cadre of multidisciplinary scientists—provide a ready capability to immediately attack urgent and devastating problems such as those caused by the sweetpotato whitefly, TCK Smut in grain, Russian Wheat Aphid infestations, Bovine Tuberculosis threats to livestock, weed infestations of range lands, and newly emerging pathogens that compromise the safety of our food.

SUPPORT FOR ACTION AGENCY

A significant part of the ARS research program is in direct response to critical Federal regulatory requirements of EPA, FSIS, APHIS, DOD, FGIS, and others. This includes issues dealing with regulations that affect commodity exports and imports like the loss of methyl bromide which will have an immediate and devastating economic impact on U.S. Agricultural trade. We're currently investigating alternative treatments to replace methyl bromide fumigants for selected commodities. ARS is involved in many regulatory and health issues dealing with Salmonella, E.coli, avian leucosis and so on. For example, last year ARS scientists developed the first rapid test for bacteria on meat and poultry. This ARS-developed test can be performed in five minutes compared to the usual procedure requiring one or more days. The rapid test is useful to industry and government inspectors for monitoring the effectiveness of intervention methods to reduce contamination on meat and poultry carcasses. These are national issues of grave concern to producers and consumers alike. As USDA's inhouse research agency, ARS must coordinate and carry out these and similar programs that a State or private institution cannot undertake or manage effectively.

GENETIC RESOURCES AND BIODIVERSITY

A large and significant part of the ARS mission deals with the management of our Nation's and the world's plant and animal genetic resources. The Agency conducts plant explorations, collects and maintains plants, insects, fungi and microbial collections that are essential to the long term viability of U.S. Agriculture. ARS carries out research to enhance these collections. It maintains plant introduction stations and other laboratories to protect and preserve our germplasm. The largest collection of seed in the world is maintained at our newly constructed National Seed Storage Laboratory in Ft. Collins, Colorado, but other important working collections also are maintained at strategic locations in the country, e.g., apples in Geneva, NY, and soybeans in Urbana, IL.

The world's first complete genetic map for cattle and swine was recently published. A data base of the major maps was developed and made available to scientists worldwide. For the first time, the maps provide a means of identifying the genotypes of animals. The information will increase the annual rate of genetic improvement since animals can be selected with more disease resistance, improved quality, and other performance characteristics.

BIOCONTROL

Alternative means for controlling agricultural pests in a manner that protects the environment are essential. Our biological control programs are carried out at a number of ARS locations here and in our foreign laboratories in France, Argentina, and China. Foreign explorations are pursued by our scientists to further our biocontrol research which ultimately will lessen our reliance on chemicals. ARS has been granted a number of patents for biological control of pests and several are currently being licensed for commercial development in the market place today.

ANIMAL DISEASE RESEARCH

The Agency carries out research at a number of national laboratories like the foreign animal disease laboratory at Plum Island, New York whose mission is to safeguard the Nation's livestock industry from financial devastation should an exotic disease like Foot-and-Mouth accidentally enter our borders. We are co-located with the veterinarians of APHIS on this Island. We are also co-located with APHIS at our National Animal Disease Center at Ames, Iowa where we jointly coordinate our efforts to reduce and eradicate other diseases and pests of our farm animals.

UTILIZATION RESEARCH—NEW USES

Our utilization laboratories continue to play a vital role in finding new uses and processes for food and non-food products of agriculture. Our utilization laboratories pioneered research to find industrial uses for agricultural commodities and continues to carry out an outstanding program. Their contributions help farmers and ranchers by increasing markets and create new business opportunities for rural America. One recent example I can cite deals with materials made of cornstarch and lipids at Peoria, IL. ARS researchers have coated and encapsulated pesticides making it possible to use smaller quantities of pesticides while expanding the use of starch and increasing the market for corn. The Eastern utilization laboratory in Philadelphia has found solutions to many food safety and health issues such as salmonella, listeria, E.Coli and botulism; our utilization laboratory in New Orleans has solved problems for our cotton farmers and industry from picking it to manufacturing a permanent press shirt. I will mention a few of ARS' many significant accomplishments later in my testimony.

TECHNOLOGY TRANSFER

The Agricultural Research Service is a leader within the Federal Government in technology transfer and commercialization. To help translate the results of our research into practical products, processes, and services, ARS has worked closely with commercial firms for many years.

With passage of the Federal Technology Transfer Act of 1986, ARS has taken the lead in the number of agreements made with the private sector to move research from laboratories and putting it to use. ARS has negotiated over 400 Cooperative Research and Development Agreements (CRADA's) with private firms to commercialize new technology and stimulate new business enterprises. Under these agreements, industry provides valuable information which helps guide ARS research, including important marketing information essential for the successful commercialization of the product/processes. In return, the first right to an exclusive license on the product/process emerging from the agreement is awarded to the industry partner.

Agreements have included a variety of technologies addressing contemporary concerns such as food safety, biological pest control, product quality and veterinary medicine.

Over 200 licenses of ARS-developed technologies are currently in place. These primarily involve licenses to industry to make, use, and sell ARS-patented products/processes.

Patents are an important component of the Agency's technology transfer program. ARS typically receives 50-60 patents each year; it has received more than 1200 patents since 1970.

ARS technology transfer has had a positive impact on small and rural businesses. In keeping with the intent of the Federal Technology Transfer Act of 1986, ARS gives first preference to exclusive licenses of its technology to small businesses, many of which are in rural agricultural locations. More than half of ARS' current licenses and CRADAs are with small, rural, and/or minority- or woman-owned businesses. At least 48 small and/or rural companies have been created based on patented ARS technologies.

ARS has received many awards and recognition for pioneering the transfer of new technologies to the private sector, including the Federal Laboratory Consortium Technology Transfer Award in 1993 for products originating for the first Federal CRADA.

AGRICULTURE'S SUCCESS

Mr. Chairman, this country is blessed with an abundant and economical supply of food. The average share of the typical American family's disposable income used for food has declined steadily from 21 percent in the early 1950's to 11 percent in 1993. The annual 1994 summary crop production estimates reaffirm that U.S. crop production was at an all-time high. Our consumers have an ever growing appetite for food. People spent a record \$510.6 billion on food raised on U.S. farms in 1994. Our farmers and ranchers are producing the great yields to keep up with this demand and agricultural research is there to ensure it happens. Without the investment in science, the conservation of the farmers' resources couldn't be maintained; new insect resistant crop varieties wouldn't be available to maintain or increase production; the battle to control insects and diseases would be lost and new markets and the means to transport agricultural produce would be stymied. The investment in agricultural research is critical to the nation's health and well-being.

ACCOMPLISHMENTS

ARS' research accomplishments span the decades, from the mass production of penicillin to the development of the "superslurper." What did ARS have to do with penicillin? ARS scientists developed the deep fermentation technique that created the breakthrough for its mass production, saving thousands of lives in World War II. You ask: "What is the superslurper?" ARS scientists invented it. This cornstarch derivative is capable of absorbing hundreds of times its weight in water. Today, you will find superslurper in everything from diapers and baby powder to fuel filters, batteries and laundry bags.

If I may, I would like to highlight a few other accomplishments:

- ARS is continuing to make major scientific breakthroughs today in food safety and nutrition, agricultural quality and productivity, environmental quality and pesticide use reduction, and in many other areas. As I mentioned earlier, last year ARS researchers at Clay Center, Nebraska developed the first rapid test for generic bacteria on meat and poultry. Also last year, ARS researchers found that foodborne pathogens, *E. Coli*, *Listeria*, *Salmonella*, and *Staphylococcus Aureus* can be effectively controlled on red meats by irradiation using doses and conditions currently approved for treatment of poultry.
- ARS research in animal and veterinary science has led to the eradication of Vesicular Exanthema, Venezuelan Equine Encephalomyelitis, Avian Influenza, Sheep Scabies, Exotic Newcastle disease and Hog Cholera diseases that would be devastating the U.S. livestock industry. ARS has also developed vaccines for Marek's disease in poultry and Foot-and-Mouth disease in livestock.
- New cultural methods, and chemical and biological controls being developed by ARS scientists are leading to the eradication of the boll weevil. This technology was provided to APHIS which is leading the eradication program.
- ARS scientists developed Lemont, a high-yielding, lodge-resistant, long grain rice which is now the number one variety grown in the United States. It is a major factor in keeping U.S. rice competitive in world export markets.

—ARS scientists also developed Oatrim which has been commercialized in meat, dairy and bakery products. Oatrim has major benefits in promoting optimum health through reducing calories, fat, and blood cholesterol.

ARS is also developing new and expanded uses of agricultural commodities which is vital to the economy of farmers and rural communities, and to strengthening the competitive position of U.S. agriculture in world markets. Bioconversion, enzyme engineering, critical and supercritical processing, membrane separation and reaction, and extrusion are all being explored and developed.

In addition:

- The ARS laboratory in Winter Haven, Florida, in cooperation with the Florida Citrus Commission, developed Orange juice concentrate, which expanded the markets for this product rich in Vitamin C.
- Basic research in our Albany, California laboratory led to the technology which is the basis for the frozen food industry today. This has been the basis for expanded convince, ready to cook products for consumers.
- Our New Orleans Laboratory revolutionized the wearability of cotton clothes with the development of permanent-press cotton and cotton blends. More recently, ARS scientists developed treatments to make cotton fabric flame retardant.
- ARS research chemist Robert W. Holley was awarded the 1968 Nobel Prize in Physiology and Medicare for isolating and characterizing the first nucleotide sequence of transfer ribonucleic acid (RNA), a basic building block of life.
- ARS scientists discovered the smallest known agent of plant disease, the viroid—a feat comparable to the discovery of bacteria.

WORLD FOOD PRIZE—JAPAN PRIZE

I could go on, but I will stop here given our time constraints. However, I would mention one more if I may. In 1992, two outstanding ARS scientists—Edward F. Knipling and Raymond Bushland—received the World Food Prize for their work of more than 40 years ago in pioneering ecologically acceptable biological control for specific insects that threaten the world's food supply. Specifically—they developed the Sterile Insect Technique which uses no chemicals, leaves no residues and has no effect on non-target species. The World Food Prize is the foremost international award recognizing individual achievement in improving the quality, quantity or availability of food in the world. The sterile insect technology used to eradicate the Screwworm, a devastating insect parasite of livestock and other warm-blooded animals, was based on a concept that originated with Dr. Knipling. This technology was used to eradicate screwworms from the U.S. in the 1960's and 1970's and more recently from Mexico, and Libya. This research has saved U.S. livestock producers and consumers millions of dollars and resulted in an additional 21,000 metric tons of meat and 8 million liters of milk each year for Mexico. In Libya and surrounding North Africa, the implications of saving already scarce food supplies and stopping the spread of screwworm devastation are enormous.

Dr. Knipling's research has been used around the world. The technology has been adopted for numerous pests that threaten agriculture and has been used in Japan for the eradication of the melon fruit fly. It is the primary technique used to control the med fly outbreak in California. In December, Dr. Knipling was named winner of the prestigious 1995 Japan Prize for his development of environmentally—friendly technologies for controlling agricultural pests. Dr. Knipling will receive the \$500,000 Japan Prize in ceremonies in Tokyo in April, 1995.

Dr. Knipling's work and the many other significant benefits that have been derived from agricultural research may not have been possible without the Federally funded research commitment, and the stability of funding long-term, high risk research.

One aside, this is the very research—research on the sex-lives of insects—that has caused a great deal of ridicule and plays well outside the scientific community. I'm afraid this kind of label jeopardizes the importance, understanding, and enormous contributions of the research. Today, biological pest control is no longer a radical or humorous idea.

BUDGET RECOMMENDATIONS

The ARS budget request for fiscal year 1996 totals \$709,810,000 for research and library services. This reflects a decrease of \$2,252,000 from the fiscal year 1995 funding levels. Within this recommended budget level, ARS proposed to finance increased operating and pay costs amounting to \$19,839,000 as well as new or expanded program initiatives amounting to \$24,700,000. These costs will be funded

from savings to be derived through the termination of selected, ongoing research projects and the closure of 12 research locations.

NEW INITIATIVES

Food Safety.—Food safety, particularly pathogen reduction, continues to be a major concern of U.S. consumers. The Department has recognized this and has formed a Pathogen Reduction Task Force to coordinate the food safety research priorities of the various responsible USDA agencies. In pathogen reduction research, ARS is the acknowledged leader in both preharvest and post harvest situations.

ARS is recommending \$2,500,000 for increased emphasis for preharvest pathogen reduction research, and \$5,000,000 for postharvest pathogen reduction research. The preharvest research will focus on the development of new technologies to identify infected animals, and control infection and contamination of livestock and poultry before they are sent to slaughter. The postharvest research will center on the development of intervention strategies, processing methods, monitoring systems, sampling methods, diagnostic tools, and risk assessment. This includes a cooperative agreement with Delaware State University for research on the enhancement and safety of aquacultural products.

Nutrition.—ARS provides the primary nationwide dietary surveys and the food composition data that are used in all food consumption surveys. Insufficient knowledge restricts our ability to devise effective nutrition intervention strategies to improve the health and well-being of specific populations. Knowledge of the role of diet in neurological, cognitive, and muscle function during aging is critical to improving the well-being and independence of our aging population. Increased knowledge of energy, protein, and mineral requirements during growth and development of body organs of infants and adolescent mothers is particularly important to WIC, school lunch and other programs on food and nutrition education. Knowledge of how nutrients effect genetic expression during development and the impact of diet on the risk factors for cancer, cardiovascular, and degenerative diseases is essential. Dietary and food consumption patterns of infants and children are also a special need of the Environmental Protection Agency in responding to the National Research Council's recommendation for improving estimates of pesticide exposure to children.

ARS is recommending \$7,000,000 for conducting a survey on Nutrition Monitoring and Food Composition. A special survey of the food consumption of infants and children will be conducted to support EPA's need for data to determine pesticide risks to infants/children.

ARS is recommending \$1,000,000 for increased research on Diet Effects on Nutrition, Research on the energy, protein and micronutrient needs for growth and development of muscle, bone, and organ functions related to genetic expression. Interactions of food components such as antioxidants in decreasing risk of disease will be targeted.

ARS is recommending \$1,000,000 for increased research on Nutrition Intervention Approaches and Evaluation. The Lower Mississippi Delta region a low-income region with specialized nutritional needs will serve as a field research area for assessment of nutritional needs and tests of the effectiveness of changed strategies.

Integrated Pest Management.—Societal and environmental concerns have firmly established pesticide use reduction as a major priority. The risks associated with pesticides has two components—the perceived or actual risks to human health and the environment from pesticide residues on food crops, in water or in the air; and the risks to production efficiency and product acceptability. Cost effective alternative and environmentally safe technologies are needed to meet the commitment of this Administration to reduce pesticide use. The Administration has established a goal for the implementation of Integrated Pest Management (IPM) practices on 75 percent of the nation's croplands by year 2000. The Department is instituting a local/regional planning process to ensure close collaborations with EPA, research and extension personnel at all levels and producers.

ARS is recommending \$5,000,000 for increased research on IPM. The objective of the IPM research is to provide methods for controlling pests by practices that are cost effective, benign to the environment, minimize development of pest resistance, and are sustainable in the long term. Consistent with priorities established in the local/regional planning process, integrated, area-wide strategies will be developed and will include host resistance, cultural management, biological control, biorational agents, natural products, and chemical pesticides when necessary.

ARS is also recommending \$1,000,000 to strengthen environmental quality research related to very fine dust particles (PM-10). With the passage of the 1990 Clean Air Act Amendments, U.S. agriculture is faced with new requirements, including controlling the emissions of very small particles from agricultural oper-

ations. ARS research will determine the sources of these dust emissions and develop new technology for reducing them. Very fine dust particles affect children, the elderly, and those with influenza, lung or heart disease, or asthma.

Genetic Resources and Biodiversity.—The preservation, availability and utilization of agricultural biodiversity are essential to ensure that an adequate supply of quality food will be available at a reasonable cost in the future. USDA's germplasm program must ensure that important plant germplasm collections in the U.S. are well preserved, free from pathogens, and are in sufficient quantities for distribution to users. New and improved varieties of plants depend on this program. Without it, we will not have continued yield and quality increases, nor the ability to impart disease resistance necessary to feed the ever expanding world population.

ARS is recommending \$1,000,000 for increased research on biodiversity. The research will develop improved methods for long term preservation of selected seed and vegetatively propagated plant germplasm, and identify economic trait loci of agricultural importance.

Rural Development.—ARS is recommending \$200,000 to establish an 1890 Center of Excellence on Rural Development at Alcorn State University, the oldest historically Black land-grant university in the nation. Located in rural Mississippi, the ARS research program, in cooperation with the Rural Business and Cooperative Development Service of USDA, will develop practical breeding, management, nutrition and health requirements for hog farming. The aim is to expand economic opportunities for small and limited-resources farmers in producing and marketing high quality swine.

With respect to the National Agricultural Library, ARS is proposing two important initiatives.

Electronic Information.—NAL's current paper-based information delivery system has become increasingly inadequate to keep pace with the requirements and computer capabilities of the typical laboratory scientist or policymaker. NAL needs to make the transition to this already emerging reality termed "library without walls." ARS is recommending \$962,000 to begin the process of making more of its information services available electronically.

National Agricultural Preservation and Storage.—More than 50 percent of NAL's books are deteriorated or disintegrating. ARS is recommending \$500,000 to begin the conversion of deteriorated print materials into electronic formats.

BUDGET REDUCTIONS

ARS is also recommending substantial administrative/management and program decreases in fiscal year 1996. These decreases support both Administration and Congressional streamlining efforts to produce savings that can be applied to higher priorities and to reduce government expenditures.

The decreases proposed in this budget total \$47,253,000. Of this amount, \$17,958,000 will come from reductions in staff-years and administrative support activities. The balance of \$29,295,000, will be achieved through savings from specific program reductions and 12 location closures, as detailed in the Explanatory Notes.

BUILDINGS AND FACILITIES INCREASES

ARS is recommending a total of \$30,200,000 for the modernization and construction of selected facilities.

A number of ARS' major facilities are outdated and deteriorating. Major building systems (e.g., heating, ventilation, air conditioning, electrical, and roofs) and infrastructures (e.g., paving, steam and water lines, and waste treatment disposal systems) have reached or passed their useful life expectancy. Deficiencies involving safety and health needs (e.g., building code requirements, asbestos removal, etc.) also need to be corrected.

Modernization of the following facilities has been underway for several years. It must be continued if ARS is to maintain the scientific capacity necessary to conduct viable and timely research.

National Center for Agricultural Utilization Research (Peoria, Illinois).—ARS is recommending \$11,700,000 for construction of the North Wing and Semi-Works building, and for planning of the Chemical Wing.

Beltsville Agricultural Research Center (Beltsville, Maryland).—ARS is recommending \$10,000,000 for: construction of a controlled environmental facility; design of new human research center facilities; design of the BARC-East infrastructure; and miscellaneous small projects.

Plum Island Animal Disease Center (Greenport, New York).—ARS is recommending \$5,000,000 for decommissioning the Wastewater Treatment Plant and upgrading the aboveground fuel storage facilities.

European Biological Control Laboratory (Montpellier, France).—ARS is recommending \$2,600,000 million for construction of a new laboratory. This facility is essential to support the discovery and development of biological control agents for use in this country.

Southern Regional Research Center (New Orleans, Louisiana).—ARS is recommending \$900,000 for construction and repairs to the Chemical Wing.

Mr. Chairman, these are new and very challenging times for all of us in Federal Government. We in ARS recognize and support the need to be responsive to the Nation's call for effective and leaner government. We will pursue these efforts and continue to provide a directed, nationally-focused research program that will enhance the future prosperity of the United States.

This concludes my prepared remarks. I will be happy to answer any questions.

PREPARED STATEMENT OF DR. WILLIAM D. CARLSON

Mr. Chairman, and members of the Committee, I appreciate the opportunity to appear before you to discuss the fiscal year 1996 President's Budget Request for the newly created Cooperative State Research, Education, and Extension Service (CSREES).

THE NEW AGENCY

CSREES was formed by the merger of the Extension Service (ES) and the Cooperative State Research Service (CSRS). CSREES has the primary responsibility to provide leadership to the land-grant university system and its partners in research, higher education, and extension. The programs of CSREES are now delivered through 9 organizational units as compared to 21 organizational units which formerly existed in ES and CSRS. Within CSREES the nine organizational units are:

- Office of the Administrator
- Plant and Animal Production, Protection, and Processing
- Natural Resources and Environment
- Rural, Economic, and Social Development
- Children, Youth, Family, Nutrition, and Health
- Partnerships
- Competitive Research Grants and Awards Management
- Science and Education Resources Development
- Communications, Technology, and Distance Education

CSREES is the USDA entree to our nation's vast university knowledge system capable of addressing issues of importance to citizens in every county of this country. The federal-state-private sector partnership which made U.S. agriculture the envy of the world will be further enhanced through the focused efforts of the new agency.

CSREES is also the Federal Government's lead agency for higher education in the food and agricultural sciences. Through higher education programs, USDA supports and encourages efforts aimed at providing a continual flow of trained scientists required by the Nation's modern, high-technology, knowledge-based food and agricultural system.

The present infrastructure is a partnership between the Federal office, State institutions, and the vast network of State Agricultural Experiment Stations and the Cooperative Extension System located in every State and the territories. Oversight and coordination are carried out by a small Federal staff. University faculty, research scientists, Extension specialists, thousands of paraprofessionals and nearly 3 million volunteers support this partnership and magnify its impact. Strong linkages with public and private groups are crucial to the partnership's success in identifying and addressing local, regional, and national needs.

The publicly funded research system of the United States has commitments from 1862 and 1890 land-grant institutions, Colleges of Veterinary Medicine, Agriculture, Home Economics, Forestry and non land-grant scientists. These efforts are conducted through 140 Colleges of Agriculture, 59 Agricultural Experiment Stations, 63 Schools of Forestry, 17 1890 Land-grant institutions and Tuskegee University, 27 Colleges of Veterinary Medicine, 42 Schools of Home Economics, and other eligible colleges, universities, institutions, industries and Federal laboratories.

Our State partners for Extension programs are the Cooperative Extension Services at the land grant universities. Together with CSREES, they form a publicly funded, nonformal, educational system that links the education and research resources and activities of the U.S. Department of Agriculture, 74 land-grant universities, and 3,510 county and city administrative units. This infrastructure is supported by Federal, state, and local funding, with CSREES being the Federal component of the system.

Additionally, CSREES works with the National Association of State Universities and Land-Grant Colleges (NASULGC) and their committees such as; the Administrative Heads Section, Experiment Station Committee on Organization and Policy, Extension Committee on Organization and Policy, Academic Committee on Organization and Policy, International Committee on Organization and Policy, Extension Administrators, Research Directors, National Association of Professional Schools and Colleges of Forestry, Deans of Veterinary Medicine, and Deans of Home Economics.

FISCAL YEAR 1996 BUDGET

Mr. Chairman, the fiscal year 1996 Budget Proposal submitted to the Congress by the President requests \$881,463,000 for the Cooperative State Research, Education and Extension Service. This is a decrease of \$53,463,000 or almost 6 percent from current appropriations. Within the programs of CSREES, the Budget Proposal is highlighted by the following:

- The unprecedented USDA Initiative for Integrated Pest Management requesting an increase of \$26.6 million for Integrated Pest Management, Pesticide Clearance and Pesticide Impact Assessment programs. These programs are major components of the Department's strategic plan for IPM which calls for implementation of IPM practices on 75 percent of U.S. crop acreage by the year 2000.
- The IPM Initiative sets an ambitious goal for USDA research and education programs to increase field adoption of IPM practices that enable farmers to achieve both economic and environmental objectives.
- The Initiative establishes a system that empowers state and local teams of growers, researchers, crop consultants and others to set priorities and expand the emphasis on the integration of pesticide use to reduce dependency on pesticides.
- To meet those priority needs for research and education, we are expanding the IPM competitive grants program that is administered by states to make sure that the necessary tools are delivered for growers to use in producing their crops.
- Through the research on alternatives program we are also making sure that, in places where producers are losing pest management tools to regulation or resistance, USDA is conducting the necessary research to develop critically needed new tools. The research on alternatives competitive grants program, as part of the MOU between USDA and EPA, ensures that new technology is available to meet pressing grower needs and that EPA will quickly register the material developed by USDA.
- Provision for maintaining the Hatch, McIntire-Stennis Cooperative Forestry, Smith-Lever formula funds, and the Animal Health and Disease Research Formula Based programs at 1995 levels.
- Providing an increase of \$764,000 for Extension programming at 1890 Institutions to enhance the Department's efforts with small-scale and minority farmers and other limited resource audiences. Maintaining Evans-Allen funding at 1995 levels and increasing the 1890 Institution Capacity Building Grants.
- Providing a \$7 million increase for a new program to upgrade the research, extension and teaching facilities at 1890 Institutions. This new program will involve the governmental streamlining principles of: merit based award; the development of human resources; the sharing of costs through public and private partnership; and the advancement of equity through diversity. This program will differ primarily from the ongoing program in that it will require full dollar-for-dollar matching from non-Federal sources and is being proposed under new authorizing legislation.
- \$15 million request for Special Research Grants to cover critical areas such as Global Change, Water Quality and Alternatives to Pesticides and Critical Issues.
- An increase of \$26.9 million for the National Research Initiative in furtherance of the goals set forth by the National Science and Technology Council to increase competitively awarded support for fundamental science to insure the long term health of America and world agriculture, and to address national priorities in environment and natural resources, health, safety and food. A major public investment in fundamental research is required to obtain the knowledge base specifically needed for agriculture and is unlikely to be done by the private sector. Funding research competitively based on merit review by peers is uniquely suited to stimulating new research activity in specific high priority areas.

- \$1.5 million for a new USDA-Hispanic Education Partnerships Grants Program that will be the foundation for USDA efforts to better serve Hispanic Americans and prepare them for careers in agricultural sciences and agribusiness.
- Initial request is made for the Native American Institution Endowment Fund for \$4.6 million to implement programs at 29 tribal controlled colleges designated as "1994 Institutions."
- Increasing Sustainable Agriculture programs by \$2.9 million for priority research projects and for enhancing training for Extension agents and other sustainable agriculture professionals.

BUDGET REDUCTIONS

As part of the Administration's efforts to curtail spending, the Budget Requests propose eliminating the following:

- \$46.4 million for Special Research Grants addressing lower priority areas;
- \$15 million for earmarked special projects within the Federal Administration line items for research, education and extension which addresses lower priority areas;
- \$2 million for AgriAbility projects which could be done by the States;
- \$2.9 million for Institution Challenge Grants which is consistent with fiscal years 1991-1994 funding level; and
- \$62.7 million for the current Research and Education—Buildings and Facilities program that is earmarked for facilities at specific institutions rather than in keeping with the Administration's policy of awarding research and construction grants through a competitive merit-reviewed process.

PROGRAM ACCOMPLISHMENTS

American agriculture is among the most efficient agriculture sectors in the world and remains a mainstay of this country and much of the world as a source of food and fiber. One reason for this success is the agriculture and forestry research, higher education, and extension systems created with the beginning of the land-grant system in 1862. This remarkable idea created a partnership in science and education to serve all the people, and this system has done just that by addressing local, regional, and national issues. The cooperative research and extension systems have yielded significant improvements in agricultural productivity, created new products, protected animal and plant health, improved nutrition and health of humans, and increased human capacity to respond to changes and opportunities. These developments have enhanced our standard of living and provided a wide variety of food and fiber at reasonable prices.

Some accomplishments of the CSREES partnerships with the States in 1994 were:

- Government Performance and Results Act (GPRA) Pilot Projects.* CSREES is one of nine USDA agencies participating as a "Performance Plan" pilot project under the GPRA passed by Congress September 13, 1993. Five targeted CES programs have been designated for inclusion: Communities in Economic Transition, Integrated Pest Management, Plight of Young Children, Decisions for Health, and Food Safety and Quality. Seven State Cooperative Extension Services are testing the feasibility of providing indicators to assess the extent to which these State programs are achieving their set goals. These pilots are intended to help States prepare for full implementation of GPRA in 1997.
- Sustainable Agriculture.* Training Centers were established through a competitive process in North Carolina, California, Pennsylvania and Michigan to initiate a technology development and transfer program under Sustainable Agriculture Research and Education. Twenty awards were made for training, mainly in multidisciplinary sustainable systems and in specific sustainable practices such as dairy systems, grazing and pasture, rangeland use, and cotton production. The outcome will be the achievement of a congressionally mandated process to deliver and train people in sustainable agriculture technology and practices.
- Each year more than a quarter million infants are born low birthweight (under 5 pounds 8 ounces). Inadequate nutrition among pregnant women may account for as much as 57 to 65 percent of these low birthweight babies. To address this issue, programs within the Expanded Food and Nutrition Education Program (EFNEP), target pregnant teens and adult women at risk. Programs such as HAVE A HEALTHY BABY in Indiana, GREAT BEGINNINGS in New Hampshire, and TEENAGE MOTHERS in Georgia have been developed and implemented. Initial evaluations are showing improvements in birthweights of babies and improved health practices of mothers. Indiana reported that of almost 1,300 women in the program, 97.9 percent had babies born at normal weight. One re-

sult of this was fewer infants in neonatal units at a significant savings in Medicaid costs. New Hampshire's program is showing an 85 percent increase in the participants' knowledge of nutrition issues specific to pregnant and parenting teens and 90 percent of the participants showed intention to change one or more behaviors. New Hampshire's success with their Great Beginnings Program has resulted in the adoption of the program by several other States. In Georgia, pre- and post-test scores showed that participants' knowledge of food and nutrition increased significantly. For babies born to participants in the program, no infant deaths were reported, 84 percent of the babies were full term and the average birthweight was 6 pounds 9 ounces.

- In Louisiana, agronomic and horticulture crops, forestry, and animal enterprises, including fisheries, contributed \$7.9 Billion to the State's economy in gross farm income and added value. Extension has over 20 agricultural and commodity programs contributing to these significant economic efforts.
- Many individual land-grant university scientists achievements were made in 1994. Examples of some significant findings include:
 - The recent identification and sequencing of a tomato gene (pto gene) that confers resistance to a bacterial disease has implications for agriculture as important as was the identification of genes in humans for susceptibility to disease. The research, carried out at Cornell University in New York has opened the way to understanding the basis for plant disease resistance, to identification of resistance genes in other plant and diseases, and to speeding up breeding for disease resistance thereby reducing the need for pesticides. Although the pto gene is not currently commercial, several commercial concerns are investigating the possibility of commercialization.
 - Significant progress was made at Washington State University to decode the steps that plants take to protect themselves from attack by pests and pathogens. These natural defense mechanisms, biochemically analyzed in potato and tomato, rely on potent enzymes (proteinase) that inhibit the attack. The genes that code for the proteinase are induced by the wounding of plant tissues and by exposure of the plants to low levels of UV light. Through this research the specific biochemical sites of inhibition are now known. Further work is planned to understand how UV light activates the genes for defense.
 - Castor oil is used in soaps, paints and varnish, resins and plastics, lubricants, and other industrial products. The value of annual U.S. consumption of castor oil, virtually all of which is imported, ranges from \$50–75 million. Lesquerella oil, which has a similar chemical composition, is being investigated by researchers in Mississippi as a replacement for castor oil. Lesquerella can be grown and processed in the United States and could potentially develop into an important new agricultural crop for American farmers. This research seeks to exploit the biodegradability of the oil; the potential for reduced emissions of volatile organic compounds; and the unique characteristics of the oil that make it attractive for use in the polymer industries.
 - At the University of Nebraska, scientists have developed new soil and water management systems which reduce the use of water by 12 inches per year and reduce nitrogen use by 25 pounds per acre. The water savings reduce irrigation costs by \$10 per acre and the nitrogen savings reduce the costs \$3.75 per acre. As an added bonus, the decreased use of water and nitrogen significantly reduces leaching of nutrients and decreases groundwater pollution.
 - A significant need for many people living in rural areas is access to affordable housing. The challenge is to design housing that would meet the needs of rural families in terms of space and convenience and still be cheap enough that they could afford to buy. A New Mexico company in Sante Fe is currently commercializing the concept of straw bale post and beam houses that would use owner and builder "sweat" equity as a means of holding down the cost. This concept provides a new market for straw, thus benefitting many farmers, and is projected to provide a house worth more than \$80,000 for a cost of less than \$50,000. Straw bales provide excellent insulation, with utility costs being projected as one-fourth of those of an equivalent size wood frame house.

The history of American agriculture is replete with examples of critical problems solved through the application of science—corn blight was eradicated within one year by applying our extensive knowledge on plant genes to creating a resistant strain; the economically devastating problem of screw worm in cattle was also solved. Today we face new challenges ranging from natural disasters to invasive pests, such as white fly and potato blight, to the social, economic, and environmental imperatives of reducing chemical use in agriculture, improving the efficiency of soil and water resource use and sustaining the economic viability of family farming. To meet these challenges we need to maintain a broad portfolio of scientific and

technological tools, applied across a wide range of disciplines, involving federal, state, and private interests, and supported by both competitive and programmatic funding mechanisms. This portfolio must be undergirded by a bank of fundamental science that can be applied not only to the problems of today, but also the unknown challenges of tomorrow.

The importance of a broad portfolio of research supported through a range of mechanisms can be illustrated by the research carried out in the Pacific Northwest on new ways to manage root diseases of wheat.

This program was established in 1965 by the Agricultural Research Service (ARS) and located at Washington State University. The program focused during its early years on understanding the causes of these root diseases and their relationship to the farming practices used in this diverse region of the United States. Obtaining the necessary knowledge about the cause and conditions that favor each new disease is time-consuming and tedious work, but is critical to assuring health and productivity whether of our crops, our livestock, our pets, or ourselves.

As one of the more significant findings, root diseases of wheat represent a major impediment to the adoption of conservation tillage by farmers. This research also showed that wheat plants with these root diseases leave nitrogen fertilizer unused in the soil and cannot compete effectively with weeds, in addition to yielding poorly. Unfortunately, the only available methods to control these root diseases were (1) to continue to use clean tillage, which leaves the soil vulnerable to soil erosion and destroys valuable organic matter; (2) to burn the stubble, which adds to air pollution; (3) or, to plant crops other than wheat, which was not economical for the region. The program therefore turned to basic research on how to harness the natural biological cycles working in soil to provide biological control of these diseases.

The necessary basic research was supported by the USDA Competitive Research Grants Office starting in 1978 and, since 1991, by the National Research Initiative. ARS funds, together with support from wheat producers and the land-grant universities in Idaho, Oregon, and Washington State, supported applied field research and continued studies on the nature of root diseases themselves. Based on this ARS work supported by the NRI, two U.S. patents were awarded to the USDA for the use of disease-suppressive microorganisms applied to the seeds of wheat to protect roots against infections. In 1994, the USDA Small Business Innovation Research (SBIR) program awarded a grant to a small business in Walla Walla, Washington, as an aid to their commercial development of this technology, which will be in cooperation with the ARS program through a cooperative research and development agreement. Of equal importance, the knowledge base generated on the nature and importance of these root diseases has a) sparked national and even world-wide interest in this fundamentally new way to manage root diseases of crop plants and b) created an intense interest among farmers throughout the Pacific Northwest who are trying to change their farming practices to control soil erosion while also increasing the productivity of their land.

This concludes my remarks, Mr. Chairman. My colleagues and I will be happy to respond to any questions from the Committee.

PREPARED STATEMENT OF JOHN C. DUNMORE

Mr. Chairman and members of the Committee, I am pleased to appear before you to discuss the proposed fiscal year 1996 budget for the Economic Research Service.

MISSION

The Economic Research Service exists to provide economic and other social science information and analysis for public and private decisions on agriculture, food, natural resources, and rural America. ERS's major functions are research and data base development, situation and outlook analysis, staff analysis, and development of economic and socioeconomic indicators.

BUDGET

Fiscal year 1995. ERS's appropriation for fiscal year 1995 is \$53.9 million, down 2 percent from fiscal year 1994. We are managing that cut (on top of a 6-percent cut in fiscal year 1994) without a reduction in force. But to do so, we are taking major cuts in accounts where we have the short-term flexibility—such as data collection and cooperative research projects with State universities—until attrition catches up with the staffing level implied by a \$54-million program level. We have had a hiring freeze in effect since February 1993, and we released all temporary employees near the end of fiscal year 1993. We have also made full use of the early-

out and buy-out authorities—about 65 employees have availed themselves of one or both opportunities and resigned or retired between April 1994–January 1995.

Fiscal year 1996. Our request for fiscal year 1996 is \$54.7 million, the same as the fiscal year 1995 budget in real terms, that is, adjusted for pay raises and nonsalary inflation and some minor transfers associated with the USDA reorganization. Assuming we continue to get some attrition in staff, we expect to begin fiscal year 1996 at a level equivalent to 620 full-time employees. The proposed budget, then, will enable us to rebuild our primary data collection budget that has been seriously eroded. In the past, ERS has reached to colleges and universities to supplement the development of the ERS analytic capacity. With the fiscal year 1996 budget, we will also be able to return to a historical amount of cooperative research agreements with State universities to complement our fundamental research programs.

The program effect of the staff reduction, however, will be to further narrow the scope of issues on which we can provide economic intelligence. To this end, we will eliminate lower priority programs and focus our resources on the highest priority programs of the Department's new mission areas: better service for farmers; making rural development a priority; elevating food, nutrition, and consumer services; emphasizing conservation programs; and ensuring food quality and safety.

Let me discuss for a minute what we are doing now and some of our plans for fiscal year 1996 in these areas.

BETTER SERVICE FOR FARMERS

Markets work best if there is equal access to good economic information by all market participants. The Economic Research Service is the American farmer's main source of economic information and analysis from USDA. ERS data and analysis of economic conditions, domestic and foreign market prospects, and farm income and financial conditions—information important to private decisionmaking—flow to farmers, agribusiness, and the public through about 20 different "outlook" products. These products range from popular periodicals, such as *Agricultural Outlook*, to regular outlook reports on major commodities, major foreign competitor regions, and specialized topics important to farm operators, such as farm income and finance. ERS is converting some hard copy commodity reports to electronic newsletters that are released immediately after the release of USDA's *World Agriculture Supply and Demand Estimates*. The electronic newsletters provide more timely and useful analyses to users and save ERS money.

ERS outlook reports complement other Departmental publications. While other reports provide data and forecasts, ERS reports explain the major economic factors influencing departmental estimates, present basic industry information and analysis, and pull together data in a consistent and comparable form from many sources.

The material from outlook publications and releases is widely used by Extension staff, news services, the farm press, private advisory services, and other organizations serving farmers. These users either reprint the material or interpret its relevance to local conditions and specific farm decisions. Thus, ERS is a major "wholesaler" of information and analysis to the food, farming, and rural constituencies of USDA.

ERS cooperates with other USDA agencies to bring its analytical capacity to bear on their program and policy decisions. Recent examples include cooperative research agreements on grain quality and crop insurance and cooperation with the Foreign Agricultural Service to analyze events in Mexico. In 1995, ERS will continue to assist on crop insurance, trade issues, and other issues as sister agencies request them. ERS publications provide key analysis to all citizens interested in policy debates. During 1995, ERS will provide background information on Farm Bill debates, in a series of background papers on major programs and commodities.

Sales of a significant share of U.S. farm production depend on competing successfully in international markets. And these are times of major change for international markets—e.g., NAFTA and GATT. The focus of our international market and country analysis is to understand how major foreign economic and political events are likely to affect U.S. agricultural trade in the next several years, thereby helping the U.S. agricultural sector and individual firms position themselves to make better longer-run investment decisions. For example, we are examining the market and trade implications of the political and economic restructuring taking place in the former Soviet Union and Eastern Europe; revisions in the European Union's farm policies; the rapid economic growth in China; and the shift to market economies by many developing countries. We also are evaluating the trade implications of food safety and environmental policies in other countries, which could

emerge as significant nontariff barriers to expanded trade. The combined effect of these events is reshaping world agricultural markets.

Results of our analyses are summarized in a series of annual reports that cover major regions of the world, including a report on food aid needs. This year we are also launching a new annual report that will focus on the major forces shaping world agriculture and their longer-run implications for U.S. agricultural trade.

Since the passage of the Food and Agriculture Act of 1977, Congress has requested that USDA prepare annual estimates of the cost of producing commodities covered by Federal price support programs. ERS has the responsibility for producing these estimates and has based its estimates on information obtained from the USDA Farm Costs and Returns Survey (FCRS) that is conducted by NASS. As I have already mentioned, budget realities have affected the availability of funds from ERS to contribute for conduct of the FCRS. The survey is conducted by the National Agricultural Statistics Service, but jointly funded by ERS and NASS. In response to budget constraints, some adjustments were made in our survey schedules and coverage in order to ensure statistically reliable data. USDA will continue to produce cost-of-production estimates for the commodities you have mandated, and our budget request for fiscal year 1996 should allow survey coverage to be extended. This means that more detailed regional cost-of-production data will be available.

We continue to seek efficiencies in carrying out our research program. For example, we are improving the design and reporting of agricultural commodity production costs and returns information, and reducing the costs of developing estimates of farm income and value added. This will allow us to improve our ability to provide analysis of the distributional implications of agricultural programs that support public debates on farm policy.

Situation and outlook information is most useful when it is timely, so ERS is using new and emerging technologies for easier and cost-effective user access to ERS information. Our electronic data products program has offered data bases on personal computer diskettes since 1986, but now offers the same data on a CD-ROM and on the worldwide Internet. Through the Internet, many extension agents around the country and over 15 million other users, including an increasing number of farmers, have free desktop access to 7,000 ERS data files and, soon, to outlook reports. For users with fax machines, ERS provides an autofax system for 24-hour access to fact sheets, outlook summaries, and similar documents.

MAKING RURAL DEVELOPMENT A PRIORITY

ERS's rural development research provides information and analysis on the conditions affecting people, communities, institutions, and enterprises in rural America. ERS helps decision makers use that information to develop policies that encourage market-driven economic development and increase the well-being of rural people.

ERS contributes to policy and program debates relating to rural people by analyzing their changing settlement patterns, family structures, skills, jobs, and economic well-being, and interpreting current and possible future trends in light of broad economic forces and Federal policies. To gain a better understanding of the transformations that are occurring in the rural economy, ERS monitors the changing structure and performance of farm and nonfarm industries including the economic linkages among industries and regions. This enables ERS to assess the effects of economic and policy shocks on the farm and rural economy. And ERS's studies of key financial, public, and other services that influence rural economic development underpin analysis of the effects of major changes in Federal spending, regulations, and tax policies.

ERS provides its rural development research findings directly to policy officials and program managers through staff analysis and two core periodicals. Rural Conditions and Trends provides policy officials and rural practitioners with a synthesis of rural economic and demographic trends. Rural Development Perspectives presents results of research on various aspects of rural life that are important to consider in formulating rural policies and programs. ERS creates and maintains extensive data bases that facilitate rural analysis. These data are used for virtually all large-scale empirical analysis of U.S. rural development issues conducted throughout the country. Users of our extensive data can now easily access them through the USDA-ERS gopher located at Cornell University or purchase electronic data products from ERS.

Despite reductions in staff, ERS will be initiating new research activities that are designed to enhance our knowledge of the rural economy. In order to better understand the factors contributing to rural job growth, ERS is designing a survey of technology, labor, finance, infrastructure use, and competitiveness of rural manufacturing establishments. This survey will identify and weigh the reasons for the lag

in the growth of rural manufacturing employment. Factors often cited are poor worker skills, lack of access to credit, absence of business and management support services, and poor infrastructure. Government at all levels now operate programs costing billions of dollars to address all of these deficiencies. Policy makers need better information on the importance of each factor in order to select the most efficient and effective strategies to promote rural competitiveness. Local leaders need similar information for planning and for nurturing indigenous entrepreneurs. ERS is also initiating new work examining the complementarities and trade-offs between economic development and the natural resource/environment base of rural areas. Environmental values are increasingly among the most important comparative advantages of rural areas; in fact, high environmental quality is the strongest single correlate of rural economic and population vitality. But we have a primitive understanding of when and how to maximize, sustain, and capture the economic value of environmental quality for rural communities, whether in the form of sustainable tourism and recreation spending, or factors that make a community a desirable place to create a new business and reside. This work is intended ultimately to provide local leaders with more information about such approaches and new options.

ELEVATING THE FOOD, NUTRITION, AND CONSUMER SERVICES PRIORITY

ERS has had a food analysis program for several decades. That program monitors the availability of food based on commodity supply and use information, estimates demand for food by different income and demographic groups, analyzes the structure and performance of food processing industries, and regularly provides cost estimates for food assistance programs. An annual publication, *Food, Consumption, Prices, and Expenditures*, reports trends in per capita consumption of basic food categories and related data. Other regular publications such as the *Food Cost Review* and the *Food Marketing Review*, report on marketing margins and the food processing and marketing industries.

ERS has expanded its food related work into nutrition education evaluation. ERS nutrition education analysis mainly supports departmental decisionmaking on nutrition related programs and policies. For example, working in cooperation with other USDA research and program agencies, ERS is assisting in developing evaluation techniques for assessing progress in improving the diets of individuals at nutritional risk.

ERS has expanded its economic research on factors affecting household and individual food choice and diet quality. This research is geared to support improved analysis and evaluation of USDA food assistance and nutrition education programs. ERS is forming a partnership with the National Cancer Institute in which ERS will study the food costs of healthy diets and NCI will study the linkage between healthy eating and disease. This is an area where surprisingly little research has been done. On-going activities in the economics of nutrition include examining the contribution that food consumed away from home makes to individual nutrient intakes, studying the health costs that poor diets impose on society, analyzing the impacts that better eating habits may have on the agriculture sector, studying consumption trends and prices of low-fat or low-sodium foods versus their higher-fat or sodium counterparts, and analyzing how nutrition knowledge, attitudes and awareness influence intakes of specific nutrients (such as fiber, iron, and fat) as well as particular foods.

ERS is the leader in USDA in the economic analysis of the food assistance programs. ERS research in this area emphasizes the full range of economic effects and represents the current state of knowledge of the relationships between food programs, agriculture, and the economy at-large. For example, ERS has been collaborating with staff of USDA's Food and Consumer Service to estimate the cost of bringing the School Lunch Program in line with USDA's dietary guidelines. This analysis is used by the Food and Consumer Services to evaluate the impact of proposed changes on the cost of the School Lunch program and on the food and agriculture sector. Preliminary results of this analysis were published in the Federal Register.

ENSURING FOOD QUALITY AND SAFETY

As national concern about the safety and nutritional value of food has grown, ERS has devoted more of its research resources to gaining a better understanding of the economic aspects of food quality and safety issues. In our recent reorganization, ERS brought economists working in the areas of chemical and microbial food safety risks together to form a new Food Safety Branch. This group will increase our analytical capabilities in these important areas by collaborating to apply comparable methodologies and approaches to risk assessment for chemical and microbial sources of food safety risk.

ERS's research in the food safety area is focused on understanding how food production and handling practices can be altered to reduce chemical and microbial contamination. The research program focuses on the marginal costs and benefits of government intervention and is designed to better understand the economic tradeoffs facing producers, processors, consumers, and regulators. For example, the agency has collaborated with USDA's Food Safety and Inspection Service (FSIS) and the Office of Management and Budget on estimating the economic effects of a number of proposed regulations including the just-released Hazard Analysis Critical Control Points (HACCP) regulations for meat and poultry.

Analysis of alternative food safety public policy options and their costs include the study of how food safety information is developed and disseminated and the study of market, legal, and regulatory incentives for food safety information. One of the key issues in food safety research is the lack of data on the incidence of foodborne illness and the costs and benefits of reducing foodborne illness. Together with Food Safety and Inspection Service, Animal and Plant Health Inspection Service, Agricultural Research Service, and Center for Disease Control, ERS co-sponsored a conference in January 1995 on "Tracking Foodborne Pathogens from Farm to Table" to explore the potential for the development of inter-agency and inter-disciplinary databases that could be used to address food safety issues.

EMPHASIS ON CONSERVATION PROGRAMS

The central theme of ERS research on conservation is to understand the interrelationships among agriculture, natural resources and the environment. The core program includes agricultural productivity; the use and value of land and water resources; the supply of and demand for agricultural chemicals, machinery, and energy; the economics of soil, water, and resource conservation; sustainable production systems; technology research, development, and diffusion; and environmental valuation and risk assessment. This program of data and indicator development, economic modeling and analysis, and program knowledge allows ERS to respond to a wide array of resource and environmental policy issues, such as estimating the costs and benefits of USDA conservation programs.

In addition to the ERS research program on conservation issues, ERS is publishing a new report, *Agricultural Resources and Environmental Indicators*, which provides extensive background and data on a wide range of issues related to agriculture and the environment. The new comprehensive report provides information on: 1. land and water use agriculture; 2. farm production practices (including nutrient management, Integrated Pest Management, crop residue management, and crop rotations); 3. the condition of natural resource use in agriculture; and 4. public policies that affect conservation and environmental quality in agriculture.

ADVANCING BIOFUELS AND NEW USES OPPORTUNITIES

Under the Departmental reorganization, the Office of Energy became a part of ERS and was renamed the Office of Energy and New Uses (OENU). OENU contributed significantly to the Administration's effort to include renewables in the reformulated gasoline program. It provided a set of comments for the Department analyzing the economic and environmental benefits from the Administration's renewable oxygenate requirement. OENU will continue to analyze this important market, participate in development and implementation of Clean Air Act amendment regulations affecting ethanol and other biofuels, and evaluate legislative proposals related to this market.

USDA, DOE, and EPA have been conducting technical and economic analysis of biomass liquid fuel and electricity. The liquid fuel analysis is focused on technologies that convert plant cellulose and hemicellulose into ethanol. Electricity can be produced by direct combustion of biomass or by gasification technologies using advanced turbine technology. Either process can use material from agricultural residues or wastes, or energy crops. We believe that when our analysis is completed it will show that in several areas of the country a mixture of liquid fuel and electricity from biomass is possible. Biomass both could provide farmers with new market opportunities and rural America with a new industrial base.

New uses refers to the development and commercialization of new farm crops and new products for existing crops. New uses include agricultural crops raised as feedstock for industrial uses such as chemical and energy production. Developing new markets for agricultural products assists farm income and helps businesses that sell goods and services to farmers. Since processing has to be near the crop, the job and industrial development benefits for rural areas are evident.

CLOSING REMARKS

I appreciate the support that this Committee has given ERS in the past and look forward to continue working with you and your staffs to ensure that ERS is addressing the highest priority issues and making the best possible use of the resources entrusted to it by the U.S. taxpayer.

Thank you. I will be happy to respond to your questions.

PREPARED STATEMENT OF DONALD M. BAY

Mr. Chairman and members of the Committee, I appreciate the opportunity to appear before this Committee to discuss the fiscal year 1996 budget request for the National Agricultural Statistics Service (NASS). This Service was created to provide useful, timely, and unbiased statistics and other information about the Nation's food and agricultural industry and rural America.

Especially for the new members of the Committee, I would like to provide a brief historical background of this Service. In 1862 as the first Commissioner of the newly formed Department of Agriculture, Isaac Newton established an initial goal to "collect, arrange, and publish statistical and other useful agricultural information." One year later, in July, the Department's Division of Statistics issued the Nation's first official Crop Production report.

The structure of farming and of the agricultural industry changed dramatically during the succeeding 130 years. However, the need for accurate, timely, and impartial statistical information on the Nation's agriculture became even more important as the Nation has moved from subsistence agriculture to a highly industrialized industry that produces food and fiber for the world market. The crop, livestock, and other estimates developed and published throughout the year, in cooperation with State Departments of Agriculture, contribute significantly to the information available on American agriculture. The State-Federal cooperative relationship, which began over 75 years ago, eliminates duplication and provides State input, while maintaining national consistency in surveys conducted throughout the United States.

NASS estimates have an important impact on the entire population since the Nation's food industry affects our nutritional well being and the quality of the environment in which we live. Because of this importance, it is essential that NASS does not compromise the quality or integrity of its surveys.

All reports issued by the NASS's Agricultural Statistics Board are made available to the public at previously announced release times. These reports are not only used to assess the supply and demand of agricultural commodities, but are used for establishing agricultural policy decisions related to commodity program legislation, foreign trade, conservation programs, agricultural research, environmental programs, rural development, and many other activities. NASS data are examined very closely and utilized by farmers, agribusinesses, food industry analysts, economists, and investors as they make decisions that have considerable economic impact on the Nation's economy.

Statistical research is conducted to improve methods and techniques used in collecting and processing agricultural data. This research is directed toward providing higher quality survey data with less burden to data suppliers, producing more accurate and timely estimates to data users, and enabling greater efficiency in the use of available resources. NASS, for example, has been a leader in the development of the use of satellite imagery to improve agricultural statistics. NASS also performs an expanding number of statistical services for other Federal, State, and producer organizations on a cost reimbursable basis.

MAJOR ACTIVITIES OF THE NATIONAL AGRICULTURAL STATISTICS SERVICE (NASS)

The primary activities of NASS are to conduct surveys which include the collection, summarization, analysis, and the publication of reliable agricultural forecasts and estimates. Farmers, ranchers, and agribusinesses voluntarily respond to a series of nationwide surveys about their crops, livestock, prices, and other agricultural activities each year. Periodic surveys are required to measure the impact weather might have on crop production during the growing season. Frequent surveys are also needed on food products that are perishable. Many surveys are supplemented by actual field observations in which various plant counts and measurements are made. Administrative data from other State and USDA agencies, as well as Bureau of the Census data from the Department of Commerce, are thoroughly analyzed and utilized as appropriate. NASS prepares estimates for over 120 crops and 45 livestock items which are published annually in almost 400 separate reports. The World Agri-

cultural Outlook Board utilizes NASS data for the U.S. portion of its reports as does the Economic Research Service in its Situation and Outlook reports.

Agricultural estimates developed and published by NASS include: number of farms and land in farms; acreage, yield, and production of grains, hay, oilseeds, cotton, tobacco, major fruits and vegetables, floriculture, and some specialty crops; stocks of grains; inventories and production of hogs, cattle, sheep and wool, goats, catfish, trout, poultry, eggs, and dairy products; prices received by farmers; prices paid by farmers for inputs and services; cold storage supplies; agricultural labor and wage rates; agricultural chemical usage; cultural practices; and other data related to the agricultural economy.

The NASS agricultural statistics program is conducted through 45 field offices servicing all 50 States. Nearly two-thirds of the Agency's staff and resources are located in the field. All State offices operate under cooperative funding and 24 are collocated with their State Departments of Agriculture or Land-Grant universities. This joint State-Federal program helps meet State and national data needs while minimizing overall costs. This is accomplished by eliminating duplication of effort which reduces the reporting burden on farm and ranch operators.

NASS has developed a broad environmental statistics program under the Department's water quality and food safety programs. Until 1991 there was a complete void in the availability of reliable pesticide usage data, which was brought to light during the Alar apple situation. In cooperation with other USDA agencies, the Environmental Protection Agency, and the Food and Drug Administration, NASS has implemented comprehensive chemical usage surveys, which also collect detailed economic and cultural practice information for the purpose of determining the economics associated with different levels of chemical use.

Under the 1994 Federal Crop Insurance Reform and U.S. Department of Agriculture Reorganization Act, NASS will provide the Consolidated Farm Service Agency (CFSA) detailed data on crop yields and average market prices for the 120 crops for which estimates are available. Although these crop estimates cover a high percentage of the cultivated land area in the United States, hundreds of other crops (mostly specialty and forage) for which there are very few official statistics available on average yield or price will now be covered under the Noninsured Assistance Program. NASS is working closely with CFSA to address these data shortfalls. NASS will also be working with CFSA to maximize the use of the acreage and production data farmers are required to report under the Federal Crop Insurance Reform Act of 1994.

NASS data on prices received by farmers are currently used by CFSA for the computation of deficiency payments. A small difference in price can amount to an increased or decreased payment of millions of dollars. For example, a penny difference in the corn price estimate affects corn price deficiency payments by plus or minus \$55 million. NASS has instituted specific survey quality improvements in order to better ensure the accuracy of these price data.

The NASS statistical research program strives to improve methods and techniques for obtaining agricultural statistics with an acceptable level of accuracy. The growing diversity and specialization of the Nation's farm operations has greatly complicated procedures for producing accurate agricultural statistics. Development of sophisticated sampling and survey methodology, along with intensive use of personal contacts and computers, enables NASS to keep up with an increasingly complex agricultural economy.

NASS works closely with the Bureau of the Census in the Department of Commerce during the planning, development, collection, and analysis of the 5-year Census of Agriculture. Key NASS field and headquarters personnel assist with detailed analysis to help make published census data as complete as possible.

NASS conducts a number of surveys and provides consulting services for many USDA and other Federal, State, and private agencies or organizations. Consulting services include assistance with survey methodology, sample design, information resource management, and statistical analysis. NASS was very active in assisting USDA agencies in surveying their customers this past year. NASS coordinated survey efforts for agencies who had similar customers and provided advice and consultation for agencies with special customers. This coordinated survey effort eliminated duplication of effort, increased efficiency, and reduced the reporting burden on farmers and agribusinesses.

NASS provides technical assistance to improve agricultural survey programs in other countries in cooperation with other Government agencies on a cost-reimbursable basis. Until recently, this program focused on the developing countries in Asia, Africa, the Middle East, and South America. However, a major effort is now underway to assist former Soviet bloc countries during their transition to a market economy. Accurate information is essential in these countries for the orderly marketing

of farm products. NASS has been successful in assisting Poland, Bulgaria, and Nicaragua and has just begun to assist Romania, Ukraine, Russia, and Kazakhstan.

NASS annually seeks input on improvements and priorities from the public through regional data user meetings with representatives from agribusinesses and commodity groups, special briefings for agricultural leaders during the release of major reports, and numerous individual contacts. The Agency has made many adjustments to its program and reports as a result of these activities.

NASS's fiscal year 1995 budget authority declined \$449,000 from fiscal year 1994 and the total available funds are down \$614,000. To continue all statistical reports and stay within our funding, NASS has reduced the following: annual Farm Costs and Returns Survey sample size; cooperative research program funding; number of surveys used to determine prices paid by farmers; development of new data processing systems; purchases of replacement equipment; staffing; personnel transfers; training; and travel.

FISCAL YEAR 1996 PLANS

The fiscal year 1996 budget request is \$89,837,000. This is a net increase of \$8,842,000 over fiscal year 1995. The proposed budget includes an increase of \$1,100,000 for an enhanced distributed processing system. NASS proposes to reduce mainframe processing costs and improve productivity by distributing list and survey processing systems to local area networks (LAN's) in the State Statistical Offices. The increased funding will also permit NASS to upgrade its communications network to support a distributed processing environment. This initiative will be completed in 2 years, after which NASS will realize increased productivity resulting in savings in operating expenses which can be redirected to future reductions in the base budget, or redirected to support new data needs or support future technology enhancements. Total cost of the initiative will be recovered in 6 years following implementation, with a net savings in total Government expenditures of \$800,000 by the year 2005. The proposed upgrade to the communications network is in line with USDA's plan for future communication systems and supports the concept of the National Information Infrastructure.

NASS will install a modern relational data base system running on the Agency LAN's and reengineer the processing systems using client/server technology. With these new systems, NASS employees will have immediate access to program data needed to efficiently complete their work assignments.

An increase of \$3,300,000 and 18 staff years for expanding the Pesticide Data Program (PDP). The Secretary of Agriculture and the Administrator of the Environmental Protection Agency (EPA) have agreed to work jointly toward the reduction of pesticide use. In order to accurately analyze the impact of chemical use, reliable data are needed for additional crops and States not currently provided through ongoing surveys. There is a particular shortage of pesticide use data on so-called "minor" or specialty crops. In addition, there is a continuing lack of information on postharvest pesticide uses that are applied closest to the time when the public consumes the food. For example, the apple industry has worked for over 40 years to enable the export of apples into Japan. Many of Japan's import barriers are due to concern over chemical use. There has been a lack of sound data to show actual usage, especially in the postharvest area. The issue of the chemical, Thiabendazole, being detected on apples recently exported to Japan illustrates the sensitivity of postharvest chemical usage. The increased funding will enable NASS to expand its coverage to 12 additional States and 10 additional crops. The funding will also provide for the collection of data on chemicals used on fruits and vegetables after they leave the farm. In the first year NASS will collect postharvest data in 12 States on apples and potatoes, both of which are widely consumed and of interest in assessing exposure for infants and children. NASS will annually rotate the postharvest surveys to other crops in other States in consultation with EPA, the Food and Drug Administration, and USDA's Agricultural Marketing Service.

An increase of \$3,000,000 and 13 staff years to collect Integrated Pest Management (IPM) and restricted use pesticide data. This funding request will support nationwide surveys on the nature and extent of IPM adoption. This information is essential for measuring progress toward meeting the Administration's goal of achieving IPM adoption on 75 percent of the Nation's crop acreage. This increase will also allow NASS to implement provisions of Section 1491 of the Food, Agriculture, Conservation, and Trade Act of 1990 by conducting national-level surveys that provide information on restricted use pesticides in all agricultural areas.

This initiative is significantly different from the PDP since this program will survey a sample of all farms in all States whereas the PDP concentrates only on the farms that produce specialty commodities. Therefore, this program permits NASS to

account for total agricultural pesticide use and IPM practices by product, and by commodity, representing all farms in the country.

An increase of \$1,837,000 for pay costs and inflation. These funds are necessary to offset increased operating costs. Continued absorption of these costs will severely affect the quality and quantity of the survey programs.

A decrease of \$284,000 and 6 staff years, through attrition at headquarters and in the field, to support the Secretary's streamlining efforts and the President's Executive Order mandating a reduction in Federal employment. Statistical programs will remain at their current level through implementing more efficient procedures.

A decrease of \$111,000 for FTS 2000, which reflects lower long distance telecommunication prices due to price redeterminations under the FTS 2000 contracts.

This concludes my statement, Mr. Chairman, and I will be happy to respond to any questions.

BIOGRAPHICAL SKETCHES

WALTER R. WOODS

Dr. Walter R. Woods serves as Acting Deputy Administrator, Partnerships, Cooperative State Research, Education, and Extension Service/USDA. His responsibilities include administration of formula funds, regional research, departmental review coordination, special research and extension projects and facility grants. Dr. Woods serves as liaison with Land-grant university administration and committees is an integral part of the responsibility. He is currently on an Intergovernmental Personnel Act (IPA) from Kansas State University and holds the appointment as Professor of Animal Sciences.

Dr. Woods received his B.S. in Agriculture from Murray State University in 1954. A M.S. in Animal Nutrition from University of Kentucky in 1955 and a Ph.D. in Animal Nutrition from Oklahoma State University in 1957.

Previously he served as Assistant Administrator for Regional Research, CSRS/USDA from 1993-1994.

Dr. Woods served as Dean of Agriculture and Director of Agricultural Experiment Station at Kansas State University from 1985 to 1992 and Director of Cooperative Extension from 1987 to 1992.

He was Head and Professor of the Department of Animal Sciences at Purdue University from 1971 to 1985. Associate Professor/Professor in the Department of Animal Science at the University of Nebraska from 1961 to 1971 and Assistant Professor/Associate Professor in the Department of Animal Sciences at Iowa State University from 1957 to 1962.

EDWARD (TED) M. WILSON

Dr. Wilson has been named Acting Deputy Administrator of the Plant and Animal Production, Protection, and Processing Division of CSREES. This division represents a timely joining of the research with education and outreach programs to provide a comprehensive approach to the solution of problems relating to food and agriculture.

Dr. Wilson earned his B.S. and M.S. degrees from McGill University in Canada with majors in animal science. His Ph.D was earned from the Ohio State University, Columbus, Ohio.

Dr. Wilson began his career with Tuskegee University where he served as Assistant Professor of Animal Science and Director of the Guayana Ranch Management Program, a special program for training ranch managers for the livestock and poultry industry in Guyana, South America. He later became Dean of the College of Applied Sciences and Technology at Lincoln University, Jefferson City, Missouri. At Lincoln University, he also served as Dean of Cooperative Extension, Agricultural Research and International Programs.

Dr. Wilson joined USDA in 1985 and served as Deputy Administrator for Plant and Animal Sciences in the Cooperative State Research Service.

In recognition of his contributions in agriculture, in 1989, Dr. Wilson received the Distinguished Alumni Award from the Agriculture Alumni Association of the Ohio State University, and in 1992, he received the Meritorious Executive Presidential Rank Award. The Presidential Rank Award is the highest recognition by the Federal government for outstanding contributions to the management of government programs.

JOHN C. DUNMORE

John Dunmore has been employed by the Economic Research Service since 1970 and has served in various international outlook, trade analysis, and leadership roles within the Agency. From 1975-1977 Dunmore was on detail to the Economic Planning Division, Ministry of Agriculture, Kenya, where he was responsible for implementation of the Integrated Livestock Development Project. Dunmore was Acting Associate Administrator in the early 1980's and resumed that position in October, 1994. Prior to October, he was an Associate Division Director, coordinating and managing the Agency's international trade research and policy analysis. Dunmore is a native of Pennsylvania and received his B.S. degree in agricultural business management in 1968 and a M.S. degree in agricultural economics in 1970, both from the Pennsylvania State University. On February 1, 1995, he became Acting Administrator of the Economic Research Service.

DONALD M. BAY

Upon receiving his B.S. degree in Agricultural Economics in June 1957, Mr. Bay joined the National Agricultural Statistics Service (NASS) of the U.S. Department of Agriculture (USDA). He served in the Illinois and Tennessee State Statistical Offices prior to being transferred to Washington, D.C. in 1965. During the following 10 years, Mr. Bay was responsible for several national estimating programs including the livestock slaughter, sheep and wool, cattle, cotton, tobacco, peanuts, seed crops, etc.

From 1975 to 1987, he served as State Statistician in charge of the Missouri State Statistical Office. He served as Chairperson of the Missouri Agricultural Leaders Group and the Missouri Food and Agriculture Council. He was a senior staff member of the Missouri Department of Agriculture and through a joint appointment was a Research Associate in the Agricultural Economics Department of the University of Missouri.

In 1988, he returned to Washington, D.C. to serve as Director of the Estimates Division. He was directly responsible for all of the Agency's estimating and forecasting programs.

In February 1990, he was appointed Deputy Administrator for Operations. This position includes the management responsibility for the State Statistical Division, Research and Applications Division, International Programs Office, and the Program Support Staff.

Mr. Bay was selected Administrator on January 30, 1995, after serving as Acting Administrator since April 1992 due to the extended illness and death of the Administrator.

Mr. Bay has considerable experience with agricultural statistics programs in other countries. Beginning in 1972, he was the project leader of an agricultural statistics development project in Thailand. He led a delegation to the People's Republic of China in 1981, after participating in an economic and statistics exchange to China in 1980. He also provided technical assistance to Rwanda and Cameroon in Africa between 1985 and 1987.

Under a World Bank program, Mr. Bay worked with the agricultural statistics program in Brazil in 1990. In 1991, he initiated an agricultural statistics exchange with statisticians in the Ministry of Agriculture in Venezuela. Most recently, Mr. Bay assisted Poland and Bulgaria to develop sample surveys and gave direction in the means to achieve an improved agricultural statistics program.

AGRICULTURE'S SHARE OF THE FEDERAL R&D BUDGET

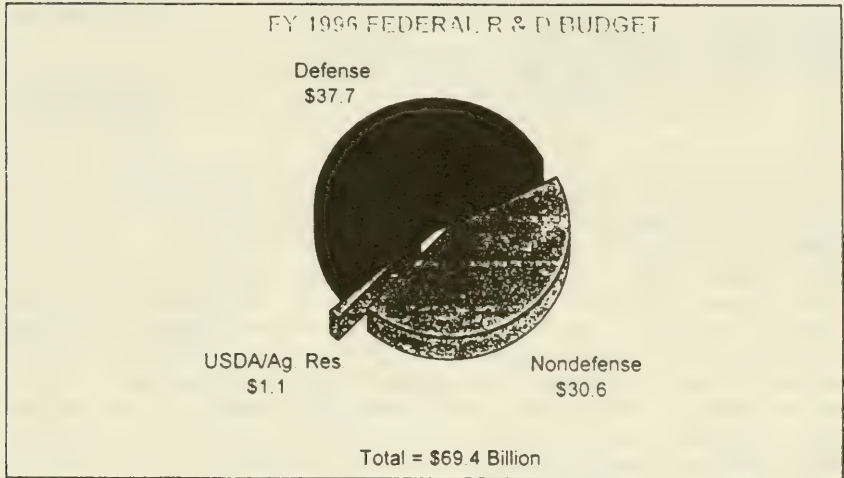
Senator COCHRAN. My intention is to ask just a couple of questions and then yield to my distinguished colleague from Louisiana, Senator Johnston, who is a member of the committee.

Someone gave me a chart indicating the total research budget for the Federal Government for fiscal year 1996, and it depicts the spending of defense, nondefense research dollars, and shows how much of the nondefense is USDA or agriculture-related research. To summarize, the total of all expenditures by the Federal Government in this budget request that is before the Congress is \$69.4 billion. The defense part of that is \$37.7 billion. The nondefense is

\$30.6 billion, and the Department of Agriculture's share is \$1.1 billion.

[The chart follows:]

INVESTMENTS FOR RESEARCH



THE IMPORTANCE OF AGRICULTURAL RESEARCH

U.S. investment in Agricultural Research undergirds the nation's economy and sustains the well-being of every American.

- Food and fiber products represented 14.5 percent of the \$6.3 trillion U.S. Gross Domestic Product in 1993.
- Employment in the U.S. food and fiber system represented 16 percent of all civilian jobs in the U.S. economy in 1993.
- One farm worker provides enough food and fiber for an estimated 128 people.
- In 1993, Americans spend only 11 percent of their disposable personal income after taxes on food compared with 21 percent in 1950.
- U.S. agricultural exports in 1993 generated \$101 billion in business activity.
- U.S. agricultural exports (\$48.5 billion) are projected to exceed agricultural imports by \$20 billion in 1995.
- Agricultural exports totaled 9 percent of the U.S. export trade in 1994.

Senator COCHRAN. I wonder if any of you would have any comments that you would like to make about that allocation of resources and what that means.

Dr. HORN. I will begin and then I think I will ask Dr. Plowman to comment. He put some of these data together.

The chart is very telling, very impressive, and very attractive. However, the data are much less impressive.

Agriculture is clearly important to the national defense. We trade internationally with our friends and we do not trade with our enemies. That is a major theme of the Department of Agriculture. And everyone in this country has a right to expect safe food on the table. Economic development in rural communities is heavily dependent upon the success of agriculture. In fact, President Clinton said last week in Atlanta that a healthy agriculture is always associated with a healthy economy.

We believe the chart reflects a disproportionate distribution of resources.

Senator COCHRAN. Dr. Plowman, any comments from you?

Dr. PLOWMAN. Yes; there are a couple of ways you can look at this chart. One, I think this committee and the Department of Agriculture and our partnership with the States can be very proud of being able to support the technology needs of this country and agriculture on such a small amount of money. So we should all feel really good about that.

However, I would also say that as we look toward the future and look at burgeoning growth of population and a decreasing land base to produce food—and not only here in this country but worldwide—we must be very careful to make sure that we can continue to provide good technology so our farmers can be competitive and so that people can eat in a relatively cheap manner. I think we have to look at total expenditures and make those assessments.

Senator COCHRAN. Thank you very much.

Dr. Carlson, any comments from you about this subject?

Dr. CARLSON. I think one of the things we need to keep in mind is that a lot of the research is being done throughout the United States at land-grant universities and other universities, and the amount of Federal dollars that is going into it is about around one-sixth or one-fifth of the total that is being invested in those universities. Unfortunately, they are having difficult times as well and their dollars are going down. So we may not see the full impact of this decline in this small amount until it is too late.

So I think it is critically important to keep this up front. That program in front of you is only one-tenth of 1 percent of the total, and I would like to call to your attention its impact.

Senator COCHRAN. Thank you very much. Dr. Horn.

Dr. HORN. Let me add, too, that we have been very successful of late in talking with the Office of Science and Technology Policy about this, and we participated about a week ago in a program where each of the major science-conducting organizations talked about their budgets and the results that they have had. And although we had a very small proportion of the budget, we had to make absolutely no apologies for the quality of our work and the impact we have had on society. We do as well as anyone does.

Senator COCHRAN. Thank you very much. Senator Johnston.

STATEMENT OF SENATOR JOHNSTON

Senator JOHNSTON. Mr. Chairman, thank you very much.

Mr. Chairman, there is a tremendous amount of waste in Federal Government, but agriculture research is not one of those places where there is waste. And I think we all have to defend what we are doing. I think it is madness, I think it is lunacy to zero in on agriculture research. Look at the green revolution which saved economies of the largest countries in the world—India, Thailand, et cetera. That was born in this country. That was created here. That was not the creation of the Asians.

SOUTHERN REGIONAL RESEARCH CENTER

In the agricultural research center in New Orleans—I do not know whether you have been there, Mr. Chairman. You need to get

there. We are very proud of the work they do down there. They created wrinkle-free or permanent press cotton, and look at what that has done. That has given, itself, a revolution all around the world.

So, Mr. Chairman, I think we need to join forces and protect this crown jewel of the American research efforts because it is very, very important for the future of this country, its economy, and for people all over the world. We lead research.

I would like to zero in—having spoken globally, I would like to speak very parochially just a second about our Houma Research Station. I know you are familiar with that, Dr. Horn, Dr. Carlson, and others.

HOUMA, LA

Mr. Chairman, down at Houma we do research on sugarcane. We have a very successful sugarcane in Louisiana, thousands of jobs are dependent upon it. We are the farthest place north of the Equator where sugarcane is grown. And the Houma Research Station has been targeted for being abolished in past years, along with other local research stations.

Now, I do not know in detail the worth of these other research stations. I suspect they are very good research stations. But I can tell you, with Houma, it is essential to the sugarcane industry in Louisiana. They come up with new varieties of sugarcane which are pest resistant and weed resistant, et cetera, and that resistance lasts for about 10 years, Mr. Chairman. After about 10 years it rapidly drops off so that you can no longer get the yield per acre on sugarcane if you do not have these new varieties coming up.

They tell me all around the world that is a problem and you have to come up with new varieties everywhere, but that is particularly true in Louisiana owing to our climate. And we have particular kinds of pests. In other words, you cannot do research in Florida that necessarily pertains to Louisiana; you have to do it in Louisiana because of our special soils and climate and special pests that are there.

Last year, we were zeroed out, but I hope that somebody—OMB made that decision, did they? Is that a fair question?

Dr. PLOWMAN. That is true.

Senator JOHNSTON. You see, Mr. Chairman, the gnomes over there in OMB do not know anything about agriculture and less about sugarcane and are telling you that you do not need the research station at Houma. Now, you know, what kind of economics is that?

Dr. Plowman, we really need this research station; do we not? I mean, I am asking you as a scientist, not as a member of the administration.

Dr. PLOWMAN. The technology coming from that station is very, very important. I would agree with that. And what you said about new varieties is also absolutely true. Mother Nature has a way of catching up with us. Unless we have new varieties coming all the time, we have new diseases and insects and other problems that destroy what we already have. So, if we are going to continue to produce, we have to have technology, and at regional and local places.

Senator JOHNSTON. Now, Houma has the only USDA/ARS geneticist, cytologist working in sugarcane cytology; is that not correct?

Dr. PLOWMAN. That is correct.

Senator JOHNSTON. And they are doing work on developing plant resistance to both sugarcane and Mexican rice borers, which are of course pests.

Dr. PLOWMAN. That is right.

Senator JOHNSTON. Last year, we asked for a study on whether Houma ought to survive and I understand that study was not done. I guess OMB did not want to release the funds. How would you suggest that we marshal our evidence for the appropriations process this year to reveal why Houma is needed? Do you have any suggestions for how we can get that evidence up and show even OMB as to why this is good economics?

Dr. PLOWMAN. Well, as you mentioned, we were instructed by Congress after the hearings last year, after the budget was presented, to do a study of all of these laboratories that were slated for discontinuance. We had that in process. In fact, we had a date in January of this year to do the Houma review in anticipation that we would have this year to present that evidence. However, when this budget was finalized we put those plans in abeyance.

So, I would say that if the station survives this budget crisis this time, we need to go ahead with that and have an appropriate assessment down there where we can gather good, objective information to present for anyone's review.

Senator JOHNSTON. On my tour down there last year they told me that if this research was not done, that after about 10 years then the yield would not be sufficient in Louisiana that to cross that economic line where they would really have to shut down the industry. Were they correctly telling me that information?

Dr. PLOWMAN. Well, that is assuming that no one else does the work. We are hearing all kinds of things nowadays, at least what I read in the paper says, that we should be privatizing a lot of this work; we should find someone else to develop technology, and that the industries that benefit should certainly contribute.

But what you said is absolutely true. If we do not continue with the work that we are doing and no one else does, then that industry will have a crisis.

Senator JOHNSTON. Now, we had talked about, if worse came to absolutely worst, trying to do some of this research at Southern Regional Research Center; but I am advised that they looked at that and said well, look, that is not really a way to do it, to take from one budget and switch over to another budget. It is essential work. If you really need this entomologist/cytologist, which they tell me is essential, they ought to be doing it right there in the existing place. You have an existing investment on an ongoing, successful enterprise, which is not exorbitantly expensive. In fact, it seems to me it is very reasonable.

Is my logic wrong, or am I missing something here?

Dr. PLOWMAN. I would be the last person in this room to take exception with what you have said.

Senator JOHNSTON. Mr. Chairman, I am delighted to have these experts here, who are, I think, very eloquently speaking out for Houma. Remember, that is spelled H-o-u-m-a. [Laughter.]

Honestly, we need to defend these things. We should not allow our research base for agriculture to be eroded. What would happen if we lost our ability to grow sugarcane in Louisiana? And on that kind of land you cannot grow anything else, basically. You cannot grow soybeans on sugarcane land; it is too waterlogged and subject to different kinds of pests and all that. I mean, you would lose thousands of jobs. You would lose the economic impact. Instead of producing these goods in America you would be importing them. In other words, you would lose from your balance of payments. And for what? So somebody could say, well, we saved some amount of money that is too small to even register in the budget.

You know, when you come out with the budget resolution, these little \$1 million things, they do not even register. You have to be \$100 million to even register on that budget. And we ought to defend these agricultural budgets, Mr. Chairman.

Mr. Chairman, I have some other questions which I will submit in writing, but I think the Houma station sort of epitomizes this whole thing. And I just want to congratulate these good scientists for the good work they do and hope we can keep them healthy in terms of not only their health but in terms of feeding them the funds they need to do the research that they do.

EVALUATION OF ARS LABORATORY CLOSURES

Senator COCHRAN. Thank you very much, Senator, for your contribution to the hearing. And in connection with the laboratory closing issue, there are several other laboratories that have been listed to be closed. The proposals this year include 12 research locations. Of the 12 proposed locations, 10 of these are research locations that the administration proposed to close last fiscal year in the budget, and the committee directed the Department to keep them open for an additional year for further evaluation. My question is: What evaluation has been done on the need for these facilities, and what new justification is available to convince the committee that these facilities should be closed?

Dr. PLOWMAN. Senator, the only research station that went through the evaluation process was at Sidney, MT, and we completed that one late last fall. And as I mentioned before, we had scheduled visits for all of the others, but after the budget was presented we just discontinued that process.

Senator COCHRAN. Is this proposal a part of an overall Department reorganization plan? What prompted the initial effort to close these facilities?

Dr. HORN. The closure of research laboratories is a part of the streamlining process. It, of course, is and will be controversial. As we deal with our part of the downsizing process, the thought is that the infrastructure needs to be reviewed and probably reduced along with programs.

We had, as you indicated, 19 laboratory closures proposed last year, of which the Congress rejected 9. And we have set up a review process for that which was short-circuited by this year's budget process. Those nine do appear on the list again.

We have reviewed the question of what we would do if the Congress, in fact, rejects this list again. The credibility that we have with Congress is critical. You should be assured that we are aware

that all of the work we do is important to someone and that none of this activity is low priority in the larger context. Everything is relative, and the cost-cutting requirements of our activities have required us to consider these closures.

If these closures are rejected, our office would pursue aggressive policy of rescheduling the site visits and the program reviews, reexamine the criteria that were used to identify the sites to be closed. We would seek opportunities to accomplish alternative savings through the streamlining process and consolidate functions wherever we could, particularly perhaps administrative functions.

Where warranted, after the review process is complete, we would develop plans to revitalize the locations that are, in fact, to be kept. And then continue to seek alternative ways to cut infrastructure and overhead costs, which may involve proposals to affect other relatively low-priority programs over time.

Senator JOHNSTON. Mr. Chairman, if you would yield, what Dr. Horn has just described seems to me a far preferable way to do this rather than just take an order from OMB and willy-nilly close these laboratories. I think he outlined a process where you go and rigorously look at each laboratory, at what they are doing, the value of that research, alternative ways to do it, alternative ways to save the money. My guess is that is what Dr. Horn would prefer. Am I correct on that?

Dr. HORN. Well, I do not mean to say that there has not been an extensive review conducted. There really has been an extensive prioritization of every project within every program within every location. And that is not what I am saying.

But I do think that we need to—I mean, we received something like 400 pieces of correspondence related to these subjects, and we are trying to find a way to cut into good research programs and accommodate the need to reduce our budget outlays, particularly with regard to infrastructure.

Senator JOHNSTON. As I understood it, they would go through a very thorough process to reevaluate these things as we had ordered last year until they came up with the budget, and I would just like to weigh in on that alternative.

Dr. PLOWMAN. Mr. Chairman, could I add a comment? In ARS we found ourselves in a very, very difficult situation, and it had to do with how to fit in our activities within the budget allocations that we have. Closure of any of our activities is a very painful process. It not only involves not doing the science which affects our customers and so on, but it impacts our people. And so it is not a pleasant process at all.

However, we have to accommodate the Federal pay raise for our people. We have to accommodate inflationary costs. There were several other program activities that were front-burner type things to do. And so we found ourselves in a very difficult dilemma, which was to find more money or discontinue many ongoing programs so that we could live within the resources that were allocated to us. So it has just been a very, very difficult situation for us.

COSTS OF CLOSING ARS LOCATIONS

Senator COCHRAN. One thing that came up in our hearing last year when we were reviewing this was that the expenses of closing,

in many cases, were about the same as the expense of operating the laboratories. Have you developed any information that is different from that this year? There are some statements in the prepared testimony indicating that ARS is proposing to finance \$19.8 million in increased operating and pay costs, plus new and expanded research initiatives amounting to \$25.2 million, through savings derived from the termination of research projects and closure of these 12 research locations.

Do you think that is a correct assumption? Is that realistic?

Dr. PLOWMAN. If we are appropriated this budget as is proposed, then we will have to make those adjustments. However, location closures cost us at least 1 year's operating funds at each location to bring about the closure. So, even though we would close something on October 1, you cannot just walk away and leave it.

Senator COCHRAN. Right. There are costs associated with closing the facilities.

Dr. PLOWMAN. That is correct.

Senator COCHRAN. That is not very clear from the budget submission. Could you provide us with an estimate and how you arrived at it, as to how much it is going to cost to close these various facilities?

Dr. HORN. We will provide such an estimate.

[The information follows:]

ESTIMATED COSTS OF CLOSING ARS LOCATIONS

The types of costs covered include salary related costs for severance pay and lump sum leave payments, relocation allowances, operating and maintenance costs up to the estimated closing date, hazardous materials cleanup and disposal, property transfers, and miscellaneous costs associated with transfer of the facilities such as boundary surveys and title searches.

The cost of closing the proposed locations is estimated to be \$8.3 million. A summary of estimated costs by location is provided:

Summary of fiscal year 1996 location closure costs

<i>Location</i>	<i>Estimated cost</i>
Brawley, CA	\$230,000
Brownwood, TX	510,000
Chatsworth, NJ	276,000
Clemson, SC	1,362,000
East Grand Forks, MN	382,000
El Reno, OK	1,732,000
Houma, LA	1,247,000
Jackson, TN	124,000
Miami, FL	1,160,000
Orono, ME	498,000
Reno, NV	289,000
Sidney, MT	515,000
Total	8,325,000

Senator JOHNSTON. Mr. Chairman, if you would yield, in some instances where they would close a facility they would send the people elsewhere, so they have to continue to pay the salaries elsewhere so there would not even be a net savings in the following year.

Dr. HORN. The other thing that we should say about the proposed savings is that it is very hard to judge what they will be because in the closing process we take a look at such things as environmental quality, and if anything is wrong at a location it must

be fixed before any transfer of the facility can occur. So, not only are these highly variable but they are very hard to predict.

CRITERIA FOR ARS LOCATION CLOSURES

Senator COCHRAN. You mentioned that each of these facilities had been carefully analyzed, or some undertaking had been made to determine that these facilities could be closed or should be closed. What criteria were used in making this evaluation and reaching those conclusions?

Dr. HORN. The principal criteria used were determinations concerning whether similar programs were carried out at other locations; their essentiality or uniqueness in carrying out national programs; State and private sector capabilities, which carry some assumptions; and the critical role in support of action and regulatory agencies.

Senator COCHRAN. There were some facilities closed. You pointed out that the list was much longer. I think 10 in total. So some were closed. We presume that those have been closed now and that the budget request takes into account the fact that those facilities are no longer a part of your portfolio of facilities.

Could you tell us what savings have been achieved and are included in the fiscal year 1996 budget request that resulted from the closure of those research facilities and consolidations?

Dr. HORN. The closure of the 10 ARS facilities in fiscal year 1995 amounted to \$8.4 million. This amount was used for unfunded program increases included in the conference report.

Senator COCHRAN. I would also like for you to give us a list of the ARS research locations that have been closed during the past 15 years, since 1980, if you can do that for the record. And, there are some other questions that we have on that subject for the record as well.

Dr. HORN. We will do that.

[The information follows:]

RESEARCH LOCATION CLOSURES

1979	Flagstaff, AZ	1987	Chaing Mai, Thailand
1980	Vernon, TX	1988	Minneapolis, MN
1980	El Paso, TX	1988	Belle Glade, FL
1980	Chickasha, OK	1988	Nairobi, Kenya
1981	Bradenton, FL	1988	Portland, OR
1982	Jeanerette, LA	1988	New Brunswick, NJ
1982	Crowley, LA	1988	Lake Alfred, FL
1982	Blacksburg, VA	1989	Poteau, OK
1983	Indio, CA	1990	Greenville, TN
1983	Mission, TX	1991	Rome, Italy
1984	Chicago, IL	1995	Fairbanks, AK
1984	Gulfport, MS	1995	Pasadena, CA
1984	Meridian, MS	1995	Georgetown, DE
1985	Natick, MA	1995	Savannah, GA
1985	Brownsville, TX	1995	Lexington, KY
1985	Palmer, AK	1995	Oxford, NC
1986	Knoxville, TN	1995	Delaware, OH
1986	Vincennes, IN	1995	Lewisburg, TN
1986	Richmond, VA	1995	Suffolk, VA
1986	Otis AFB, MA	1995	Rotterdam, The Netherlands
1986	Rio Pedras, PR		
1986	Denver, CO		
1986	Lake Charles, LA		

Proposed

1996 Brawley, CA
 1996 Miami, FL
 1996 Houma, LA
 1996 East Grand Forks, MN
 1996 Sidney, MO
 1996 Chatsworth, NJ

1996 El Reno, OK
 1996 Jackson, TN
 1996 Brownwood, TX
 1996 Reno, NV
 1996 Orono, ME
 1996 Clemson, SC

BIOTECHNOLOGY

Senator COCHRAN. I know that ARS has a lot of specific research projects underway. One is biotechnology. Tell me, how much are you allocating in terms of resources of the Service to the conduct of the research activities in biotechnology?

Dr. PLOWMAN. It is great to have someone behind you that just gives you a piece of paper that says the figure.

Senator COCHRAN. That is great. Somebody behind me gave me the question so we are even. [Laughter.]

Dr. PLOWMAN. Biotechnology is really a set of tools that you use to apply to the solving of problems, and we have tried to use these very sophisticated tools in many, many things that we do. For example, we are doing a lot of genetic engineering research on crops for nearly all the major crops. We estimate that we spend about \$90 million a year in biotechnology. That is utilization of these new tools toward solving the problems.

Senator COCHRAN. And, are these funds that are used at ARS research facilities, or are they contracted out? How do you do this?

Dr. PLOWMAN. No; they are a part of the allocation to each of our locations if they are doing that kind of work.

For example, at the National Animal Disease Station at Ames, IA, or at Plum Island, they use this kind of technology in engineering new vaccines or in trying to develop new tests to detect diseases. Or in all of our plant-breeding programs around the country, they are using these technologies to insert genes from one plant to another. So it is a part of the ongoing work at any location if that work is amenable to the use of biotechnology tools.

GLOBAL CLIMATE CHANGE

Senator COCHRAN. I know that there is also research being done on global climate change. Could you tell us how much money you allocate to this research effort and what specific problems you are addressing?

Dr. PLOWMAN. Yes; the global climate change activities really have to do with determining all of these impacts on the stratosphere of the use of agricultural chemicals or the production of methane, for example, from animals and from growing rice and other crops; and to try to determine how much of those chemicals contribute to the depletion of the ozone layer, and then what technologies we can use to mitigate those things. We are assessing how important they are, how much agriculture contributes toward them, and what things we can do in agriculture to mitigate the production of those greenhouse gases.

So essentially that is the program. We are spending about \$24 million a year at that effort.

Senator COCHRAN. Do you know of any significant findings that have been made as a result of the research in that area?

Dr. HORN. Let me comment on some of the things. We have done a considerable amount of work on, for instance, carbon dioxide enrichment of the atmosphere, which would be a product of climate change and other things. And there are going to be some parts of the globe that benefit from enhanced CO₂ enrichment because it causes plants to grow faster. Others will suffer. It would change the distribution of major crop production strategies and policies.

It is important to note that this is a subject that is being discussed right now in Berlin as we speak. Although the world industry component did not participate as heavily this year as they did in the Rio conference a few years ago, there are major progress reports being delivered this week. We do have a representative, Dr. Gary Evans, taking part in that as a member of the U.S. delegation. The real progress that we have seen so far will become apparent within the next few weeks as the results of this conference are published.

But we have specific research projects on global climate change parameters that are showing us quite a bit.

METHYL BROMIDE

Dr. PLOWMAN. One of the most important parts of that has to do with the extensive use of methyl bromide in this country. We use it for two purposes. It is a fumigant for soils. That is very, very important in controlling a lot of root diseases and insects in soils. We also use it as a treatment for postharvest products to destroy those organisms so that we can ship them around the world, so it is very important for our export trade.

The methyl bromide is scheduled to be discontinued here at the turn of the century, and that would have a very devastating effect on agriculture unless we can find some alternatives. Part of our global climate change program is to find new ways of doing the same things that we are doing now with methyl bromide. We are looking at strategies on how to do that. One of those is to look at resistance in the plants themselves so that we would not need to use methyl bromide or the chemicals in the first place.

We also are looking at our total germplasm repositories and determining if we have resistance to pests which is a very important part of that effort. There are a lot of activities going on in anticipation that we might have a crisis here in the year 2001.

GLOBAL CHANGE

Dr. HORN. Let me also please call on Dr. Carlson. We have considerable activity in global climate change in the other agency as well.

Senator COCHRAN. Dr. Carlson.

Dr. CARLSON. The global climate change research occurs in several program segments. One is through the national research initiative in which there is \$11 million in fiscal years 1995 and 1996 going out to grants that are directly related to this. There is also a program to develop UVB monitoring. This has been funded for some time through the national research initiative and through a special research grant to develop the instrumentation that can measure the UVB, which actually is a measure of the change in the ozone layer. We all are participating in this type of research.

Senator COCHRAN. To what extent is private industry conducting similar research? Do you know?

Dr. CARLSON. The role of private industry in UVB monitoring is through development of the instruments. Now, they are participating in this; however, we also provide funds for instrumentation. They are the ones we depend upon to develop this instrumentation. It is a very difficult thing to measure within the certain wave lengths that are required. We can get the very sophisticated instruments, but the ones that you put out in the field throughout the country are the ones that we are stressing.

Senator COCHRAN. Is there any duplication in your judgment between what you are doing and what ARS is doing in this area?

Dr. CARLSON. I think there is a very close relationship.

Senator COCHRAN. Well, you talk to each other so you know what the other is doing.

Dr. CARLSON. I think one of the best things we can say is that our chief scientist for NRI is an employee of ARS. So, I think that keeps a pretty good balance. We could give other examples.

Dr. HORN. Mr. Chairman, this is also one of half a dozen programs that are, in fact, identified as cross-cutting the agencies of the mission area in the Department. We have an Office of Global Climate Change. We also have our Economic Research Service involved in global climate change research, and John Dunmore has reported on that subject as well.

Senator COCHRAN. Mr. Dunmore, would you like to comment?

Mr. DUNMORE. Mr. Chairman, we have been developing over the last 2 years sort of an analytical framework that allows us to look at the potential for change in global production trading patterns as a result of global warming or global climate change. It is a relatively small effort on the part of ERS, but it is a contribution to the broader departmental effort at global climate change.

Senator COCHRAN. I also noticed that the Forest Service and the Natural Resources Conservation Service are also engaged in this global change research.

Dr. HORN. That is correct.

Senator COCHRAN. If you added it all up, was that \$24 million the total being spent by all? Or was that just ARS' share?

Dr. HORN. I am sorry. We are going to have to get back with that number for you from the budget office.

Senator COCHRAN. I have that in a list of things that you can just submit for the record. We will ask you to do that for the record.

[The information follows:]

NSTC COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES, SUBCOMMITTEE ON GLOBAL
CHANGE RESEARCH

Agency	1994 actual	1995 current estimate	1996 President's budget
Agricultural Research Service:			
Methyl bromide research	\$8,500,000	\$13,100,000	\$18,100,000
Other global change research	10,400,000	11,300,000	10,100,000
Total, Agricultural Research Service	18,900,000	24,400,000	28,200,000

NSTC COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES, SUBCOMMITTEE ON GLOBAL
CHANGE RESEARCH—Continued

Agency	1994 actual	1995 current estimate	1996 President's budget
Cooperative State Research, Education, and Extension Service	11,700,000	12,200,000	14,000,000
Economic Research Service	800,000	800,000	800,000
Natural Resources Conservation Service	1,500,000	1,500,000	1,500,000
Forest Service	22,000,000	22,000,000	22,000,000
Total, USDA global change research	54,900,000	60,900,000	66,500,000

DISTRIBUTION OF FEDERAL FUNDS

Senator COCHRAN. I assume, too, that in the CSREES—I have to learn to put those two E's in there now—that you probably undertake to have a geographical distribution of funds that is fair and touches every area of the country. For the record, I want you to submit for us, if you can, where you are spending this money and the grants that you are giving to universities and colleges.

Dr. HORN. We will do that for the record.

[The information follows:]

DISTRIBUTION OF FEDERAL PAYMENTS FOR RESEARCH, EDUCATION AND FACILITIES AT STATE
AGRICULTURAL EXPERIMENT STATIONS AND OTHER STATE INSTITUTIONS - FISCAL YEAR 1994

STATE	REGULAR FORMULA	REGIONAL FORMULA	TOTAL	COOP FORESTRY RSH (MS)	1890 UNIT & TASK UNIT (EA)	ANIMAL HEALTH & DIS RSCH	SPECIAL RESEARCH GRANTS	COMPET RESEARCH GRANTS	HIGHER EDUCATION GRANTS	FED ADMIN DIRECT APPROP	FACILITIES	BIOTECH RISK ASSES	TOTAL FUNDS
ALABAMA	2,860,766	784,575	3,645,341	660,370	3,106,412	115,054	954,857	950,237	50,000	1,799,614	-	-	11,281,885
ALASKA	778,832	135,056	913,888	439,801	-	7,309	4,700	312,500	50,000	-	-	-	1,728,198
AMER SAMOA	647,744	20,502	668,246	-	-	-	-	-	50,000	-	-	-	718,246
ARIZONA	1,076,856	714,108	1,790,964	284,104	-	50,090	993,401	1,230,857	109,735	-	776,000	75,192	5,310,343
ARKANSAS	2,468,305	687,605	3,155,910	582,522	1,371,270	85,725	3,506,656	532,299	50,000	491,939	2,587,960	-	12,364,281
CALIFORNIA	3,273,272	1,471,722	4,744,994	621,446	-	478,943	2,776,219	11,344,134	521,792	449,061	2,023,420	105,139	23,065,148
COLORADO	1,462,527	1,027,111	2,489,638	310,054	-	281,169	1,478,306	1,827,724	212,000	-	310,400	-	6,909,291
CONNECTICUT	1,220,708	467,900	1,688,608	219,233	-	17,523	398,943	1,220,729	50,000	-	-	-	1,594,136
DELAWARE	844,125	350,009	1,194,134	89,485	529,856	19,919	5,000	368,406	50,000	347,948	319,130	-	2,923,878
DC	418,220	101,050	519,270	-	-	-	9,700	157,000	50,000	-	-	-	735,970
FLORIDA	2,075,458	638,691	2,714,151	595,497	1,138,295	139,293	2,691,781	2,214,203	180,000	225,000	267,720	72,884	10,238,824
GEORGIA	3,225,784	1,077,882	4,303,666	712,269	1,750,003	138,507	2,341,480	2,056,991	112,620	250,529	1,634,450	72,888	13,373,403
GUAM	674,344	115,643	789,987	37,586	-	-	293,200	-	50,000	-	-	-	1,170,773
HAWAII	834,127	362,119	1,196,246	141,384	-	7,560	2,544,804	313,807	50,000	2,935,972	-	-	7,189,773
IDAH0	1,375,661	563,015	1,938,676	426,826	-	49,950	1,130,016	597,711	50,000	-	-	-	4,253,179
ILLINOIS	4,113,966	953,614	5,067,580	336,004	-	161,287	809,926	5,836,116	266,000	673,592	809,950	75,192	14,035,647
INDIANA	3,772,107	803,706	4,575,813	348,978	-	87,092	2,746,840	3,072,918	441,585	-	-	-	11,273,226
IOWA	3,952,525	1,602,634	5,555,159	232,206	-	246,445	5,423,807	2,054,495	180,000	673,592	-	-	14,440,896
KANSAS	2,396,644	738,906	3,135,550	180,308	-	197,776	1,303,940	1,243,260	129,479	-	1,164,000	-	7,354,313
KENTUCKY	3,789,400	795,676	4,575,076	400,877	2,022,180	82,032	135,128	1,296,020	50,000	872,742	-	-	9,434,255
LOUISIANA	2,280,182	649,036	2,929,218	608,471	1,248,362	104,099	1,342,989	1,010,679	50,000	821,779	-	-	8,115,597
MAINE	1,198,365	487,671	1,686,036	569,547	-	20,492	1,666,729	360,483	50,000	-	-	-	4,153,287
MARYLAND	1,653,055	633,614	2,286,669	271,130	920,371	39,077	410,926	1,562,612	50,000	202,491	1,618,930	10,000	7,352,306
MASS	3,782,842	934,260	4,717,102	258,156	-	28,131	1,189,799	2,906,629	266,000	-	-	-	6,890,857
MICHIGAN	3,782,842	934,260	4,717,102	530,622	-	73,946	6,162,076	2,978,307	266,000	-	-	-	14,728,052
MICRONESIA	294,410	-	294,410	-	-	-	-	-	50,000	-	-	-	344,410
MINNESOTA	3,704,493	843,359	4,547,852	504,674	-	170,741	1,379,988	1,709,129	445,962	-	-	-	8,758,346
MISSISSIPPI	2,941,697	793,388	3,735,085	647,395	1,587,583	70,902	3,923,216	646,738	50,000	1,397,533	91,180	-	12,149,632
MISSOURI	3,583,077	753,415	4,336,492	426,826	1,930,086	166,650	2,056,087	2,595,568	212,000	954,480	2,355,160	-	15,033,349
MONTANA	1,298,842	630,544	1,929,386	413,832	-	71,849	46,823	1,104,120	50,000	-	1,811,960	-	5,427,990
NEBRASKA	2,222,755	864,465	3,087,220	167,331	-	206,721	2,920,911	1,576,986	376,452	-	-	-	8,335,623
NEVADA	772,223	345,238	1,117,461	63,536	-	20,851	307,191	606,647	50,000	-	-	-	2,165,686
NH HAMPSHIRE	973,277	350,743	1,324,020	323,029	-	8,555	4,700	633,018	50,000	-	-	-	2,343,322
NEW JERSEY	1,419,757	1,138,392	2,618,149	193,282	-	17,154	1,779,272	1,403,237	50,000	-	2,123,330	-	8,184,424

NEW MEXICO	1,110,044	379,847	1,489,891	245,181	-	39,133	1,116,734	543,575	50,000	-	774,060	-	4,258,634
NEW YORK	3,609,327	1,449,984	5,059,311	673,145	-	222,014	3,604,025	6,115,278	50,000	-	2,427,910	72,884	18,225,367
N. CAROLINA	4,860,867	1,125,072	5,985,939	673,145	-	98,656	1,288,391	4,031,528	169,480	640,322	2,981,780	-	19,387,226
N. DAKOTA	1,836,849	567,721	2,404,570	76,510	-	51,395	1,735,064	978,725	50,000	673,593	1,661,460	-	17,431,317
N. MARIANAS	554,355	-	554,355	-	-	-	-	-	50,000	-	-	-	604,355
OHIO	4,494,093	913,962	5,408,055	374,928	-	101,541	986,981	1,760,413	116,143	-	255,110	-	9,003,171
OKLAHOMA	2,282,918	582,088	2,865,006	361,953	-	153,925	1,170,793	1,016,410	126,000	-	341,440	-	7,315,528
OREGON	1,721,816	893,059	2,614,875	699,294	-	91,502	3,712,045	2,623,430	212,821	-	2,427,910	-	12,381,877
PENNA	4,447,830	1,194,682	5,642,512	491,699	-	139,685	1,442,468	2,656,537	278,484	-	-	-	10,651,385
PUERTO RICO	3,108,422	698,623	3,807,045	102,460	-	11,744	279,319	130,000	50,000	-	130,000	-	4,380,568
RHODE ISLAND	773,318	363,188	1,136,506	115,434	-	4,957	155,756	744,256	50,000	-	-	-	2,206,909
S. CAROLINA	2,488,909	647,935	3,136,844	517,649	-	25,001	615,082	725,862	50,000	899,796	-	-	7,322,267
S. DAKOTA	1,688,050	572,557	2,260,607	128,409	-	97,407	453,341	437,230	50,000	-	-	-	3,426,994
TENNESSEE	3,609,238	803,308	4,412,546	485,750	-	65,472	129,442	1,456,682	125,992	1,202,315	2,210,610	-	11,973,627
TEXAS	4,725,470	1,342,702	6,068,172	543,598	-	420,172	1,467,047	5,053,986	180,000	819,869	566,480	-	17,649,124
UTAH	974,319	737,800	1,712,119	154,358	-	57,997	2,022,981	584,570	50,000	-	751,750	-	5,333,775
VERMONT	1,027,313	307,541	1,334,854	297,080	-	13,784	1,948,186	121,070	98,385	-	-	-	3,809,359
V. ISLANDS	659,900	112,398	772,298	50,561	-	-	238,398	-	50,000	-	-	-	1,111,257
VIRGINIA	3,082,157	734,986	3,817,143	569,547	-	86,577	296,899	1,383,497	230,000	2,056,394	1,424,930	-	11,511,468
WASHINGTON	1,958,888	1,382,778	3,341,666	660,371	-	158,149	3,888,519	4,765,554	374,000	449,062	4,655,030	-	18,292,351
W. VIRGINIA	1,944,855	511,100	2,455,955	387,902	-	12,114	4,700	197,001	50,000	-	-	-	3,107,672
WISCONSIN	3,715,521	956,237	4,671,758	478,725	-	174,750	666,301	5,017,424	445,605	-	1,918,660	148,076	13,521,299
WYOMING	917,505	503,085	1,420,590	206,257	-	40,309	86,886	571,853	50,000	-	970,970	-	3,346,865
OTHER	-	218,900	-	-	-	-	375,507	-	-	-	-	-	633,007
SBIR	1,894,326	601,681	2,496,007	302,771	-	79,934	1,227,353	1,484,222	-	197,777	-	-	6,197,748
PEER PANEL	-	-	-	-	-	-	5,541	475,376	23,465	21,590	-	5,494	531,466
SUBTOTAL	126,116,509	40,065,854	166,182,363	20,173,930	27,290,760	5,311,160	81,712,270	98,591,039	7,700,000	19,056,990	41,261,710	712,941	467,993,163
UNOBIG BAL	26,238	-	26,238	-	-	-	-	-	970,000	-	19,109,150	-	20,105,388
SUBTOTAL	126,142,747	40,065,854	166,208,601	20,173,930	27,290,760	5,311,160	81,712,270	98,591,039	8,670,000	19,056,990	60,370,860	712,941	488,098,551
FEDERAL ADMIN	4,903,509	-	4,903,509	624,270	844,710	222,040	3,261,470	4,122,840	150,000	2,236,470	1,293,132	-	17,658,441
UNOBIG BAL	-	-	-	-	-	-	-	-	30,000	-	864,489	-	894,489
SUBTOTAL	4,903,509	-	4,903,509	624,270	844,710	222,040	3,261,470	4,122,840	180,000	2,236,470	2,157,621	-	18,552,930
BIOTECH RISK ASSESSMENT	145,681	46,209	191,890	10,800	21,530	17,800	111,260	357,121	-	2,540	-	(712,941)	-
TOTAL	131,191,937	40,112,063	171,304,000	20,809,000	28,157,000	5,551,000	85,085,000	103,071,000	8,850,000	21,296,000	62,528,481	0	506,651,481

SOURCES OF FUNDS ALLOCATED FOR COOPERATIVE EXTENSION WORK
FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1994

STATES	GRAND TOTAL	TOTAL FEDERAL FUNDS	TOTAL WITHIN STATES	FUNDS FROM FEDERAL SOURCES					FUNDS FROM NON-FEDERAL SOURCES				
				PENALTY MAIL	RETIREMENT	ALLOTHER	RENEWABLE RESOURCES EXTENSION ACT	1890 COLLEGES EXTENSION PROGRAM	1890 COLLEGES FACILITIES PROGRAM	STATE (ESTIMATED)	COUNTY (ESTIMATED)	NON-TAX (ESTIMATED)	
Alabama	\$ 37,180,374	\$ 12,537,084	\$ 24,643,480	\$ 361,157	\$ 487,825	\$ 6,158,343	\$ 62,581	\$ 2,620,974	\$ 843,214	\$ 21,692,456	\$ 2,244,200	\$ 706,822	
Alaska	4,666,575	1,363,881	3,482,684	41,543	37,940	1,262,033	42,465	—	—	3,275,694	—	206,800	
American Samoa	1,089,728	938,728	150,000	19,445	—	920,281	—	—	—	150,000	—	—	
Arizona	10,595,209	7,850,000	114,454	141,166	—	2,445,311	39,256	—	—	6,000,000	811,000	644,000	
Arkansas	26,442,393	19,499,662	7,177,000	291,687	61,701	10,016,792	71,349	1,183,922	403,926	15,900,572	1,515,123	482,887	
California	62,576,342	51,777,000	19,499,662	652,684	43,701	10,016,792	64,672	—	—	37,291,000	9,896,000	4,568,000	
Colorado	19,103,387	15,443,051	3,660,316	160,161	139,128	3,264,822	38,746	—	—	7,472,716	7,575,538	334,795	
Connecticut	2,590,596	3,133,309	107,235	107,235	—	3,133,309	38,746	—	—	3,135,209	—	—	
Delaware	5,725,865	2,307,578	3,335,658	175,055	4,130	1,447,552	38,746	—	—	2,207,872	123,169	176,537	
District of Columbia	4,843,396	4,843,396	—	—	—	—	—	—	—	22,471,066	17,511,848	1,513,676	
Florida	50,200,007	6,464,267	41,735,740	41,735	439,022	6,019,433	66,535	1,098,811	427,721	26,066,855	9,069,608	7,427,112	
Georgia	55,067,576	12,484,463	42,583,115	492,534	612,310	9,244,008	89,000	1,578,218	468,833	1,393,297	—	—	
Hawaii	2,364,706	1,851,609	513,097	27,771	—	963,636	—	—	—	6,062,929	—	—	
Idaho	9,730,414	1,667,485	8,062,929	72,018	33,722	1,522,969	36,746	—	—	8,647,800	—	—	
Illinois	40,265,337	3,146,353	37,118,984	150,268	2,779,940	47,279	—	—	—	22,356,846	4,215,263	2,028,547	
Indiana	9,737,706	11,664,679	28,600,656	537,365	484,713	10,612,113	50,468	—	—	13,165,230	9,126,047	294,172	
Iowa	9,737,706	24,102,449	506,511	379,518	8,810,819	40,860	—	—	—	18,196,930	9,126,047	4,750,000	
Kansas	42,292,762	10,217,199	32,075,563	449,659	496,344	9,230,250	36,746	—	—	13,947,858	12,859,214	3,490,283	
Kentucky	36,700,510	8,403,155	30,297,355	331,611	517,409	5,515,369	36,746	—	—	19,010,356	11,366,721	771,974	
Louisiana	43,443,492	8,947,714	22,430,718	474,722	606,602	9,469,697	56,512	1,973,939	520,692	21,000,221	404,000	532,000	
Maine	31,378,432	8,947,714	322,025	423,665	6,947,078	63,744	—	1,067,032	387,350	2,241,175	1,814,258	—	
Maryland	7,031,330	2,705,307	4,326,223	107,845	93,068	2,447,467	36,746	835,170	373,033	2,241,175	—	—	
Massachusetts	7,381,089	3,646,570	3,734,519	205,461	3,170	3,446,454	36,746	—	—	20,740,254	10,927,218	1,079,500	
Michigan	43,224,725	10,477,753	32,746,972	465,810	529,016	9,187,474	60,140	—	—	100,000	—	—	
Minnesota	1,372,740	1,024,740	346,000	27,268	704,126	6,377,848	46,884	—	—	18,077,186	10,622,694	5,324,473	
Mississippi	43,795,380	9,771,035	34,024,345	444,739	339,586	8,323,741	74,558	1,294,632	410,717	15,282,937	2,015,684	1,120,300	
Missouri	29,208,303	1,017,318	28,190,985	344,144	343,704	9,046,579	60,116	1,972,090	518,512	15,960,492	3,510,119	3,546,779	
Montana	35,366,333	12,360,433	23,017,390	425,942	111,294	2,653,578	53,598	—	—	2,965,966	2,987,671	901,871	
Nebraska	26,873,277	6,645,300	20,227,977	129,239	336,291	5,025,476	36,746	—	—	13,663,065	6,589,288	2,762,116	
Nevada	7,969,521	2,215,269	5,754,003	247,490	81,075	55,563	1,316,913	—	—	3,669,247	3,607,977	475,449	
New Hampshire	8,969,521	1,472,297	7,497,224	1,472,297	—	—	—	—	—	3,101,558	2,032,766	1,564,632	
New Jersey	7,555,534	1,941,763	5,613,771	85,889	85,978	1,731,152	36,746	—	—	6,766,627	1,564,632	1,564,632	
New Mexico	14,612,356	3,917,040	10,695,316	180,597	166,994	3,530,703	36,746	—	—	10,695,316	1,564,632	1,564,632	
New York	11,884,458	2,796,392	9,127,868	113,000	166,537	2,432,977	44,070	—	—	8,690,891	23,351,743	18,933,237	
North Carolina	64,257,000	11,762,234	52,494,766	667,705	822,632	10,546,068	64,166	—	—	29,382,975	10,695,316	976,000	
North Dakota	62,958,709	17,189,031	45,769,678	636,289	822,632	12,757,155	38,746	2,352,703	534,886	18,064,603	2,625,000	—	
Ohio	12,760,617	3,960,617	8,799,999	155,677	185,774	3,620,420	38,746	—	—	5,178,000	—	—	
Oklahoma	1,143,318	920,770	222,548	22,810	11,079	888,660	52,093	—	—	15,198,767	12,460,011	1,992,846	
Oregon	28,169,271	12,168,647	16,000,624	596,916	307,023	5,922,833	36,746	1,179,540	416,263	14,684,824	3,492,524	1,851,000	
Pennsylvania	22,048,166	8,101,566	13,946,600	295,146	307,023	5,922,833	36,746	—	—	14,000,500	3,492,524	29,000	
Puerto Rico	32,313,439	4,528,688	27,784,751	348,767	348,767	3,846,269	60,977	—	—	13,191,000	1,560,000	6,560,000	
Rhode Island	1,135,424	1,135,424	—	593,202	147,716	11,753,754	77,767	—	—	6,703,411	1,430,638	16,623	
South Carolina	1,436,964	1,436,964	—	290,034	134,965	7,568,755	36,746	—	—	1,363,500	41,298	25,000	
South Dakota	9,943,724	1,479,798	8,463,926	42,394	1,256	1,346,568	36,746	—	—	16,950,362	1,597,366	1,100,508	
Tennessee	30,591,846	21,608,224	8,983,622	304,744	404,193	6,652,647	63,226	1,145,439	413,265	16,950,362	2,067,001	371,435	
Texas	11,177,283	3,640,765	7,536,518	164,693	116,647	3,560,479	36,746	—	—	4,837,262	—	—	

Tennessee	37,123,163	12,996,422	24,126,741	481,541	704,220	9,511,254	64,930	1,776,219	476,248	18,701,300	5,241,641	183,000
Texas	74,619,237	20,349,706	54,269,551	670,634	1,091,021	13,278,574	65,791	2,426,150	597,336	40,003,351	13,600,000	466,000
Utah	10,766,035	2,175,060	8,590,955	93,343	116,724	1,926,267	36,748	-	-	6,692,000	1,626,370	272,565
Vermont	5,270,167	2,036,027	3,234,140	70,968	72,340	1,633,945	36,748	-	-	3,234,140	-	-
Virgin Islands	1,602,578	864,501	641,077	23,532	-	940,969	-	-	-	641,077	-	-
Virginia	41,703,041	10,337,261	30,365,760	416,265	558,108	7,932,259	76,163	1,500,442	451,004	21,234,054	9,244,726	275,000
Washington	23,610,236	1,669,535	18,940,701	136,577	128,216	1,835,419	75,393	-	-	1,627,015	6,256,596	557,950
West Virginia	1,915,752	1,035,323	880,429	193,292	193,215	4,633,541	55,372	-	-	3,000,000	500,000	-
Wisconsin	45,444,320	9,436,546	36,007,763	476,045	417,734	6,462,546	61,771	-	-	20,991,374	14,081,516	1,332,693
Wyoming	6,533,779	1,020,216	4,713,561	78,237	71,944	1,631,291	36,748	-	-	3,135,012	1,573,549	-
Unallocated 1)	47,331,299	47,331,299	-	-	-	47,331,299	-	-	-	-	-	-
GRAND TOTAL	\$ 1,429,156,030	\$ 419,399,890	\$ 1,009,756,140	\$ 15,453,000	\$ 15,252,000	\$ 353,907,290	\$ 2,749,520	\$ 24,453,120	\$ 7,584,960	\$ 659,920,748	\$ 274,272,106	\$ 75,563,268
Dist of Columbia 2)	1,867,131	984,000	903,131	-	-	984,000	-	-	-	903,131	-	-

1) This includes \$485,219 available for Special Projects; \$902,600 for Integrated Pest Management Projects; \$1,633,000 for Pesticide Impact Assessment Projects; \$2,018,000 for Agrability Projects; \$1,975,000 for Food Safety and Quality Projects; \$2,963,000 for Sustainable Agriculture Projects; \$1,750,000 for Indian Reservation Projects; \$10,000,000 for Youth At Risk Projects; \$8,154,000 for Water Quality Projects; \$2,585,000 for Nutrition Education Projects; \$1,221,000 for Agriculture Telecommunications Projects; \$591,480 for Renewable Resources Ecosystem Management; \$2,000,000 for a Rural Health and Safety Grant; \$1,500,000 for Rural Technology Grants; \$4,000,000 for Federal Employees Retirement (FERS); and \$5,663,000 for Congressionally earmarked projects.

2) District of Columbia Public Postsecondary Education Reorganization Act

AQUACULTURE

Senator COCHRAN. You know, one of the new food production activities in our State that has grown so much in recent years is aquaculture. We have got a lot of questions that still are being raised about disease and the various factors affecting efficient production of farm-raised fish. Does your research undertake to assist those who are engaged in this type activity? I will not ask you how much you are spending on that; we will probably just ask that for the record later on. But, where is the research being done, and what is your assessment of the importance of that activity?

Dr. HORN. We will begin with the ARS contribution.

Dr. PLOWMAN. We think aquaculture is a very, very important component of agriculture research. As we look at the depleting world harvest of wild fish, it seems to me that if we are going to have fish to eat we have to rely more and more on domestic production. And, as you well know, in Mississippi the production of catfish is going up all the time. We have a very active program at Stoneville with catfish, as well as in some of the other States. So we think it is an extremely important activity.

We have aquaculture work going on not only there but at Auburn and in Hawaii. We have some work going on in New Orleans. For example, one of the problems with farm-raised catfish deals with off-flavor problems at harvest time. We have some scientists working on that at our New Orleans laboratory and making good progress toward solving the problem.

We have a cooperative program now at Pine Bluff, AR. We are also working with some other species besides catfish and have an initiative in West Virginia on trout and cold water fish. We think it is certainly a growing activity. There is not as good a science base in raising fish as there is in pigs, cows, sheep, dairy cattle, or whatever. But you have many of the same kinds of problems.

Over the years we have solved many nutritional, disease, reproduction, and genetic problems in these other species. With catfish and other species of fish we are just at the embryo stage in developing the same kind of technology, so we think it is extremely important.

FIRE ANTS

Senator COCHRAN. Last week at our hearing we had APHIS here talking about their activities, and Senator Bumpers asked a question about the fire ants and talked about the realities of those problems. It just coincidentally happened that I was down in Mississippi last weekend walking through a field with a friend of mine and he pointed down to a fire ant mound and he said, "Have you all done anything about that lately?"

I am going to ask you: Have you all done anything about that lately? Dr. Carlson?

AQUACULTURE RESEARCH

Dr. CARLSON. If I may, I would like to comment on the work on aquaculture. We are very pleased and proud that the Cooperative State Research, Education, and Extension Service is spending \$14,352,000 in research and \$407,000 in the extension area. A good

part of this is in Mississippi. We have other areas around the country, of course, in Arkansas, Alabama, and Oregon just to name a few. We will provide additional information for the record. Part of the NRI writeup on basic research leads to fish vaccines, and I think this would be one that you might be very much interested in.

[The information follows:]

AQUACULTURE

The CSREES aquaculture research and extension programs are highly diverse in terms of areas of science covered, species included, and funding mechanisms used. The major areas of research include genetics, aquatic animal health, nutrition, waste management, and product quality. Research is conducted on a number of species including catfish, crawfish, trout, salmon, shrimp, oysters, and other important species. Current funding sources for aquaculture research include formula funds, the National Research Initiative, Special Research Grants, 1890 Capacity-Building Grants, direct Federal Administration and the Regional Aquaculture Centers. The Regional Aquaculture Centers Program is an example of an innovative multi-disciplinary team building approach that links research to extension education programs. Strong industry involvement in the direction of this program has enhanced the use of research findings in a variety of commercial applications. The National Research Initiative Competitive Grants Program has supported basic research that has led to the development of vaccines to protect farmed trout and salmon from two deadly viral disease, IHNV and IPNV. These diseases may cause up to twenty percent mortality in fish populations. CSREES is also responsible for coordination of all Federal programs in aquaculture.

FIRE ANTS

Senator COCHRAN. That would be helpful to have for the record and we appreciate that.

What about the fire ant research? Are you all doing any research?

Dr. PLOWMAN. Yes; we are spending about \$1 million a year on research of fire ants and they are still growing and becoming more and more of a problem. We have some tools that are helping us. We have developed and released four different bait toxicants. The idea here is to control these critters, as they are foraging for food, and have them pick up something that would be detrimental to them and take it back to their nest and kill the whole hive. So we have been working to try to develop those things.

We have been doing some exploring in Argentina, for example. They have a long history of working with the fire ants, and they have some biocontrols that we are now evaluating to see if we can bring them here to help us control the ones that we have. We have a very active program that is probably not adequate to completely do the job but we are trying to do the best we can.

Senator COCHRAN. Senator Bumpers.

Senator BUMPERS. Thank you, Mr. Chairman.

Dr. Plowman, on that subject, the fire ant continues to move north; right?

Dr. PLOWMAN. That is correct.

Senator BUMPERS. As a climatological factor, how far north can they go?

Dr. PLOWMAN. Not very far, I hope. But I do not know. Like most insects, they have a great ability to adapt. They get more hardy all the time. We thought that perhaps they would stay in the very southern tier because of cold weather as they move north, but they

have probably moved faster than we anticipated they would. I do not know how far they will go.

Senator BUMPERS. Do you detect any slowing of the northward trek?

Dr. PLOWMAN. That is difficult to answer. Most populations like fire ants move from wherever they have become established. They are still moving.

STUTTGART FISH LABORATORY

Senator BUMPERS. Dr. Horn, on aquaculture, I recently introduced a bill to transfer the Stuttgart Fish Laboratory to USDA. First of all, I think aquaculture ought to be essentially and exclusively under the jurisdiction of the USDA. There are people who take strong exception to that. But the raising of catfish in Mississippi and Arkansas is clearly an agricultural undertaking, so I just thought it would be better to transfer that facility's mission over to USDA.

Are you familiar with the fact that I introduced that bill?

Dr. HORN. I am. We have a copy of the January 19 entry of Senate bill 185 I think it is, the Stuttgart National Aquaculture Act, and we have, over the past 18 months or so, visited the Stuttgart Laboratory. Of course, it is in very close proximity to the Rice Research Program that we have underway there at Stuttgart and it is a fine facility. It would be a tremendous contribution to anyone's program.

We questioned specifically what overlap there might be with other existing activities, and particularly the warm water aquaculture programs that we have in Mississippi. We determined that there is a significant opportunity to have a very different mission there.

First of all, some of the species would be quite different. The genetics program at Stoneville would not be in any way duplicated in Stuttgart. And there are a number of other nutrition programs related to catfish that we would not undertake at Stuttgart. To my knowledge, there is no bait fish program at Stoneville, and that is a significant part of the Pine Bluff/Stuttgart enterprise related to rural development. And on the basis of the rural development initiative, we could do some of that kind of work as well.

The one place where there might be replication—and I call it that instead of redundancy—is in the development of pharmaceuticals for use in the aquaculture industry. The close proximity of the laboratory in Stuttgart to the Food and Drug Administration laboratories in Arkansas would, it seems to me, be a plus in establishing that kind of a program there. But, in fact, pharmaceuticals are so underrepresented in the aquaculture industry that it seems to me there is plenty for both facilities to do, and I do not see any heavy level of duplication with the cold water aquaculture programs elsewhere.

PHARMACEUTICAL USE IN AQUACULTURE

Senator BUMPERS. You have raised an interesting point. How extensive is pharmaceutical use in aquaculture?

Dr. HORN. Well, it is very limited. Aquaculture is an industry that contributes to what was the IR-4 minor use program—it has

been renamed for animal species. I am sorry I do not know that term—but a rapidly increasing one. And, in fact, it has been necessary to draw resources, funds, from not only the old IR-4 program but from other sources, to begin to get clearance for pharmaceuticals in aquaculture. Fish disease is a serious problem limiting growth, productivity, and of course it causes mortality. So it is a big issue.

And we are so far behind our neighbors and other nations in terms of producing an adequate quantity of seafood and fish that there is a lot to be done there.

RICE GERMLASM CENTER

Senator BUMPERS. What is the status of the Rice Germplasm Center in Stuttgart? We got \$4,752,000 for that last year but that is not quite enough to complete it, is it?

Dr. PLOWMAN. Well, yes; we have enough money to build this facility now. In fact, we expect to let a construction award during this fiscal year. The planning has all been done. We had to scale it back from initial plans, but the planning is all done and we will award a contract this fiscal year.

LOWER DELTA NUTRITION INITIATIVE

Senator BUMPERS. Good. I do not know whether the chairman has asked the question about the lower delta initiative?

Senator COCHRAN. No; I have not.

Senator BUMPERS. I guess, Dr. Horn, I should ask you this. Senator Cochran, Senator Johnston, and I have all been interested in the lower delta initiative, which as you know is coordinated between six institutions of higher learning. Can you give us an update on the status of this initiative?

Dr. HORN. I took part in the site visits with a small group of people going around to determine what the capabilities of each of the participating institutions might be and trying to gain some insight into how we might coordinate such a project. It is very important to make the distinction here that this is a nutrition intervention research initiative, which is to say, research on how to intervene. Very different from anything else that we think has been done in the lower delta.

And I am very happy to say that the entire group was very pleased with what we saw at each possible participating location. Those include Alcorn State University, the Arkansas Children's Hospital Research Institute, the Pennington Biomedical Research Center, Southern University and A&M College, University of Arkansas at Pine Bluff, and the University of Southern Mississippi. So we had representation in Mississippi, Arkansas, and Louisiana.

Last year, \$1.5 million was appropriated to this project to initiate the planning process. That was divided equally between the participants and, thank you very much, also a portion provided to the Agricultural Research Service by the Congress, not at the request of the agency, to make sure that we did coordinate the planning of this program not only among the participants but with the existing in-house human nutrition research programs.

There has been a considerable amount of preliminary discussion, and those funds have been identified for the locations. They know

they are coming; they have been identified as principal participants in the project. There has been a series of premeetings and there will be a strategic planning conference, I believe, the end of this month to get this project off and running. I would say that we are very hopeful that this is going to have a positive impact.

DELTA TEACHERS ACADEMY

Senator BUMPERS. Dr. Horn, another thing that I got started several years ago was the Delta Teachers Academy. I really was disappointed that there was no request for money in the 1996 budget. Are you familiar with that?

Dr. HORN. Dr. Carlson is currently responsible for the Extension Service, and although that is not carried out by extension personnel per se, we do manage that through the Extension Service. So I will ask Dr. Carlson to respond to that.

Dr. CARLSON. The Delta Teachers Academy was initially funded in 1994, and it is providing approximately 375 teachers at 25 sites throughout the seven lower Mississippi Delta States.

It is providing approximately 375 teachers at 25 sites throughout the seven lower Mississippi Delta States with development opportunities by teaming them with university scholars in onsite sessions and residential summer institutes. The subjects focused on during these training opportunities are English, geography, history, mathematics, and science.

Senator BUMPERS. Dr. Carlson, let me tell you the genesis of that.

Several years ago, I noticed in either Time or Newsweek magazine that the Carnegie Foundation was funding, with some private money, teacher seminars. And the one I read about was at the University of Texas where 4,400 teachers had sought entry into a summer seminar at the University of Texas for that 9-week seminar, and they got stipends to take care of the expenses while they were there. And they had 4,400 applicants for 244 spots, which shows that teachers are trying to upgrade their skills and they want to do better.

I was interested in that and I have been promoting it ever since. The National Endowment for the Humanities does about 65 or 70 of these a year, and then there are some others done under other Federal law. I think it is a tremendous program.

And then, the people who run the so-called Teachers Academy came to see me and they said, we essentially use people who are on sabbaticals from some of the finest institutions in America who are willing for a very small amount of money, to go into poor schools, poor school districts, and use their talents to try to find out how that poor school district—for example, three in my State, perhaps three or four in Senator Cochran's State—how you can go into some of the poor school districts and improve the quality of teaching, the morale of the faculty, and indeed the results in the students being better prepared.

And the so-called Teachers Academy—I think started at Emory University. I think that may be where it is housed. The idea is to get some of the best talent in America—such as the people who came to see me, there was one from Harvard, one from Brown, one from MIT. That has been many years ago when they came to see

me about this and told me how the program worked. I have been a stout proponent of it ever since.

If you go to the places where these people have gone to use their expertise,—I mean, they start off talking about do you have disciplinary problems here. Well, all schools have disciplinary problems. How do you deal with them? And they try to help them deal with that. But, more importantly, try to help teachers who are teaching science and political courses, at the secondary level.

And so we started off picking out 25 of the poorest schools in the entire delta—Mississippi, Arkansas, Louisiana, and maybe one other State. I thought it was a good idea but you have not asked for any funding for it. GAO says it is too soon to really evaluate the program, but apparently the program was in place, and so I was curious as to whether you knew how well the academy had functioned. And if you are not, we ought to get together and try to figure out, if it is worth continuing or not.

Dr. CARLSON. We are aware of the academy of course, and we are aware that with 2 years in operation it is probably a little early to determine, just as GAO has said, exactly how it is functioning.

Senator BUMPERS. It seems to me this is the heart of rural development in this country. Some of those schools desperately need this kind of expertise in their rooms. When you can get some of the best minds in the country into some of the poorest schools in the country, that seems to me like it ought to be a good deal for everybody.

Dr. HORN. Senator Bumpers, my recollection of this is that it originated back in Georgia and moved to an office in Memphis—

Senator BUMPERS. It is in Memphis now as I understand.

Dr. HORN. And that in fact, the National Faculty is a team of extraordinarily talented people, and that the process that a school would go through is to request input on a particular subject matter. They would, for instance, say they need input on English literature and the group would screen its faculty and send people down for an intensive course of a couple of weeks to talk about English literature and upgrade the talents of local teachers.

My sense is that it is a very, very popular program, and logic would suggest that it is effective.

I think that it fell into the process of being cut out with some other earmarks and it is not an in-house program per se, which suggests that perhaps it was not reviewed using the same mechanism.

Senator BUMPERS. I will visit with Senator Cochran about it and we will see what we can do about it.

Meanwhile, if you could send us something in writing on an update on that, it would be very helpful.

Dr. HORN. We would be very glad to do that.

[The information follows:]

DELTA TEACHERS ACADEMY

The Delta Teachers Academy has been funded within the Extension appropriation for the last two years. In 1994 the amount of funding was \$2.0 million. In 1995, the amount is \$3.9 million. The 1995 amount has already been provided to the National Faculty for the conduct of this program. As you know, the State Extension Services are not involved in the conduct of this project. The Federal Extension partner, within USDA, manages the grant directly with the National Faculty organization.

In each of the two years, the Congress has requested GAO to review this project and provide a report on its effectiveness. The initial GAO report concluded that the project was still in the early stages and a complete review could not be done at that time. As far as we know, GAO is in the midst of conducting the second review. As of yet, we have not received any information from this effort.

Senator BUMPERS. Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator, for your contribution to the hearing.

Senator Harkin.

Senator HARKIN. Thank you very much, Mr. Chairman. I apologize for being late. I just came from another committee and we were dealing with another form of research, health research. I got to thinking that a lot of what we are doing in that area is kind of connected to a lot of the things we are doing in animal and plant research, also. It is very closely connected. So I apologize for being late. I did want to be here for the testimony, although I am sorry I missed it. I will read it over carefully.

SWINE RESEARCH CENTER

I wanted to focus a few questions on specifics and then a couple of general questions. I would like to direct my questions, I think, probably to Dr. Horn first of all regarding the Swine Research Center that has been approved, has gone through the Congress funding, but it has been somewhat tied up now because of rescissions. I do not know; I think we are going to be OK. I know Senator Cochran has been supportive of it, and we are appreciative of that, on the swine research facility.

There has been, I think, some different information out there, different views. Misinformation has come out on it and I wanted to clear up a couple of things for the record.

Dr. Horn, is research of the nature planned for the National Swine Research Center being conducted at any other facilities?

Dr. HORN. I am going to work with Dr. Plowman on this question. We anticipated that you might be interested in this subject. That particular part of it, Senator, I am going to refer to Dr. Plowman.

Dr. PLOWMAN. Well, the answer to the question is no, we are not doing the specific kinds of work at other places and we are not aware that the land-grant universities are doing the same kind of work.

Senator HARKIN. Will conducting the research plan for the National Swine Research Center cause any adverse effects on federally supported research being conducted elsewhere?

Dr. PLOWMAN. I wish I was very confident in saying that it would not have any effect.

Senator HARKIN. Adverse effect.

Dr. PLOWMAN. It all has to do with what happens in the future. We cannot do this work within the existing budgets that we have, and so if we are directed to take money away from the existing programs and put it toward this work, then it is going to have an impact. So that just has to remain to be seen.

Senator HARKIN. What can you tell us about the planning and construction schedule? There have been some earlier problems with the bid process being suspended on this project. Can you tell us

what the schedule now is for the opening of the bids, the award of the construction contract, and the construction of the laboratory and office buildings?

Dr. PLOWMAN. Yes; we had that whole process underway, and when the rescission bill was first presented we put it in abeyance. But it has only been slowed down about 30 days and we put the process on track. We now will have a bid opening on the 11th day of this month, and we will award a contract on the 11th day of May if, in fact, we have money to go ahead and do that. So that is all in process again.

Senator HARKIN. So the award of the construction contract could be by May 11, assuming that the funds are there.

Dr. PLOWMAN. That is correct.

Senator HARKIN. And construction could begin whenever.

Dr. PLOWMAN. We expect that we would have ground-breaking soon after that and go right ahead with the project.

Senator HARKIN. Assuming that the Senate view on this issue prevails, can you assure me that this schedule will not be altered?

Dr. PLOWMAN. That is correct. I can assure you it will not be.

Senator HARKIN. I appreciate that very much.

One last part of this whole thing has to do with the research farm itself. Can you tell us regarding the planning of the construction schedule for the research farm and what steps are required for completing this phase of the center?

Dr. PLOWMAN. Yes; in conjunction with the swine industry in Iowa and with the university, we have located a farmsite. We are in the process of doing some extensive environmental assessments to make sure that there would be no impediments to going ahead with constructing the animal facilities that we need there.

We have also had some public communication with the community, and I might say that there is some opposition, as I am sure you are aware. It seems like nowadays no one wants anything next to them. And I think it is an ironic situation. One of the very serious problems we have with livestock production that is looming ahead of us is to be able to produce livestock in an environmentally sensitive way. And so that is one of the purposes of this new center. And it is the very reason that the neighbors do not want us to have it.

So no one wants that sort of thing beside them. But if we are going to produce livestock for the consuming public to enjoy we have to have them, and we have to have facilities to raise them in. So part of the purpose here is to find out how to do that in an environmentally friendly way to mitigate the waste, the odors and so on. We are hoping that we can convince the neighbors that we will not be a problem to them and that this will contribute to swine production all over the country.

Dr. HORN. Senator Harkin, I would like to add that, as we have proceeded through the development of this budget, we have had a regular dialog with the university and the industry in Iowa about this. And with regard to this issue, they are aware of the sensitivities in the neighborhood. The university, I believe, is prepared to make this land available at next to no cost, and it is the site of choice. And barring some unforeseen circumstance in the environ-

mental impact statement, it is probably where this facility would be built.

In addition, they have been forthcoming relative to operating cost. And my understanding is, although I have not seen any sort of contractual arrangement, that the university is quite willing to participate in the operations of the Center commensurate with their interest in a cooperative program. So those are all good things that have come out of the dialog to go along with this budget.

Senator HARKIN. I know that some concerns have been raised in the immediate area in the vicinity of that farm. Again, I think those concerns will have to be taken into account and addressed by Iowa State. I assume they are and I hope they are, because I would hate to see this thing hung up on that issue.

There is an environmental impact statement. Do you know when that is due in or when that has got to be filed?

Dr. PLOWMAN. I think in the near future. It sticks in my mind that it will be completed in May.

Senator HARKIN. I thought it was this summer sometime. You may be right.

I appreciate your responsiveness to those questions, and I appreciate the commitment that you had to continue on with this. I am hopeful that Senator Cochran's position will prevail in conference on this. We will be there to give him every bit of support we can. And I thank the chairman for his support of this.

NEW USES AND PRODUCT RESEARCH

Just one last area if I might, Mr. Chairman, completely apart from the Swine Research Center. It is another area that I have had long interest in. I started back in the eighties on it, connected with Senator Conrad when he came here to the Senate. It is research and development of new products and uses. I am talking about the Alternative Agricultural Research and Commercialization Center [AARC].

What share of ARS and CSREES funds are devoted to new uses and product research? How do you coordinate research funding and policy decisions within these two units with the activities of the AARC Center? Are those coordinated? Can you assure me that they are coordinated and that we are not duplicating that type of thing?

Dr. PLOWMAN. I can take a first shot at that. One thing you can be assured of is that there is no duplication. In fact, most of the AARC projects that have now been funded have come out of the ARS laboratories, so it is an extension of this basic science to develop the technology, and now it needs the AARC-type activity to bring it toward commercialization. With that sort of an arrangement, you can be assured that there is not duplication.

We are very much aware of and have participated in the evaluation of all of the AARC projects and submissions and have a lot of dialog with the whole New Uses Council. So I think that is going very well. I can get you a figure here in a minute about how much we are spending on new uses, but it is considerable. As you well know, the four major utilization laboratories that ARS has have a long history of work on new uses and have developed a lot of new products from agriculture. So that is a very high priority issue for

us, and we are still very much interested in increasing our activities there.

Senator HARKIN. So, obviously, then, there is a coordination, a consultation, you work closely with the AARC Center.

Dr. PLOWMAN. Oh, yes.

Senator HARKIN. Good.

Dr. PLOWMAN. I do not think there is anything going on in AARC that we are not involved with and have a lot of dialog with.

Senator HARKIN. Excellent. Dr. Carlson?

Dr. CARLSON. As far as the Cooperative State Research, Education, and Extension Service, we put \$28,781,000 in fiscal year 1995, in this area. Various programs, such as the Hatch Act special grants, and the national research initiative are involved. We also coordinate with the AARC program.

Dr. PLOWMAN. We have about \$78 million a year devoted to new uses.

Senator HARKIN. Very good. I appreciate it very much. Thank you all for your responsiveness. I hope that you open that bid on April 11.

Dr. PLOWMAN. We are looking forward to that and hope it is less than we have estimated.

Senator HARKIN. We all hope that. Thank you very much, Mr. Chairman.

INTEGRATED PEST MANAGEMENT

Senator COCHRAN. Thank you, Senator, for being here and raising those issues.

I noticed that both the ARS and CSREES have very healthy increases requested for the integrated pest management initiative. Could you take turns telling us about that and why this research is important?

Dr. HORN. Let me begin by saying integrated pest management is what we are calling a departmental initiative, which brings not only special visibility to it but a special attempt to mobilize resources across agencies to apply in a coordinated way to this problem.

We have a commitment to apply IPM strategies on 75 percent of the crop acreage in this country by the year 2000. And in conjunction with that, we are coordinating all of our various agency research programs that relate to integrated pest management and associated things, other pesticide programs, areawide pest management, biological control, and the like. So let us begin with the CSREES group this time. And this will also include a comment from our ERS group that is involved, and NASS, too.

Dr. CARLSON. Mr. Chairman, I would like to call upon one of my distinguished acting deputy administrators for the Plant and Animal Production, Protection, and Processing Unit. They are the unit that is handling the total coordination, and I would like to call on Dr. Edward M. Wilson.

Senator COCHRAN. Please come forward, Dr. Wilson.

USDA'S IPM INITIATIVE

Dr. WILSON. Mr. Chairman, I am Ted Wilson, and I am pleased to comment on the USDA's IPM initiative. As you know, sir, pest

problems continue to be a critical problem in agriculture production. It creates a tremendous loss in the overall production.

The Department decided that it was important that we coordinate the activities in the Department. I think it is a model program today that we have redirected funds and brought together the eight agencies in the Department that have programs in IPM. We have what is truly an outstanding coordinated effort and that is the IPM coordinating committee which is made up of the eight administrators of the eight agencies and chaired by the Deputy Secretary of Agriculture.

In addition to that, we have a program subcommittee made up of members of the eight agencies; and to ensure complete coordination we have brought in a professor from Montana State University who will be serving as chairman of the program subcommittee and as coordinator for the Department's program. We believe it is a totally coordinated effort and one that is definitely needed.

As you know, the Secretary of Agriculture stated that, by the year 2000, we should have 75 percent of our cropland under IPM. That is quite a goal to achieve. Hence, we needed a coordinated, focused effort to do so. In fiscal year 1995, USDA has invested \$185.2 million in IPM programs.

Senator COCHRAN. That is across-the-board, in all of USDA agencies?

Mr. WILSON. Yes; that is total USDA.

Senator COCHRAN. We noticed that CSREES asked for a \$26.6 million increase from last year's level, and ERS asked for a \$5 million increase from last year's level. We were curious about the total level of current funding for this initiative.

How much is going to be required in the future years to reach the goal of 75 percent by 2000? Have you got that mapped out? The Economic Research Service has to figure that out?

Mr. DUNMORE. Well, we are not able to estimate how much it will cost to reach that 75 percent goal. But one of the most recent activities of our IPM research program has been looking at through surveys of cropping practices, producer behavior with respect to the adoption of various IPM practices, and assessing the economic and noneconomic factors that determine the adoption or lack of adoption of various IPM practices.

The initial results of that research effort indicate that now over one-half of the Nation's crop acreage is under at least a minimum level of IPM practice; in other words, reduced pesticide and chemical use.

So, again, I do not know how much it will cost to get that 75 percent goal, but at least the initial results indicate that over one-half the acreage is under some form of IPM.

Senator COCHRAN. Mr. Bay, you have a part of the action on this initiative, too, I understand.

Mr. BAY. Yes, Senator; the work that ERS is analyzing is from the surveys we are currently conducting, which are targeted to specific crops like corn and soybeans. We have an initiative to expand that so that all farms and all crops would be covered in a nationwide survey that would measure the progress that was made in the adoption of those processes.

This initiative, along with an initiative to cover more minor crops with targeted surveys, make up our major increases for this coming year.

Senator COCHRAN. I suppose the goal is to minimize the use of pesticides and other forms of weed control and things of that kind in the production of crops. Is that it?

PEST MANAGEMENT TECHNOLOGY

Dr. PLOWMAN. Could I give you an example of that? The ARS thrust is to try to develop some areawide pest management technology so that we end up not having to spray. What has been happening over the last 50 years is a philosophy that when we get pests we spray them. Or we use some other way of killing the pests.

What we need to move toward is a situation where we do not get the pests, so we do not have to spray. And then if we can do that, we do not have the problem. We do not have the expense, and we end up reducing the use of these agricultural chemicals that everyone is so concerned about.

So there have been two or three things that give us a great deal of hope that we can accomplish those objectives. I think one example is the eradication of the boll weevil in the South. You know, cotton farmers went out of business years ago because of the boll weevil. But now, because we have learned how the boll weevil reproduces and over winters and moves from crop to crop, we developed a program to eradicate it. And we have done that now in many of the States in the South. As a result, a tremendous increase in cotton production has happened in Georgia, North Carolina, and South Carolina.

BOLL WEEVIL ERADICATION

In fact, this year the eradication program starts in central Mississippi. As you well know, if you can eradicate the boll weevil, farmers will not have to spray 8 or 10 or 12 times during the year.

At Stoneville last year we had a very interesting pilot project, and it dealt with how to eliminate or greatly suppress another very important problem on cotton, the bollworm. We have developed a virus, a polyhedrosis virus, that you can infect the bollworms with to kill them. You do not have to use spray and chemicals. We tried that on a small area with rather remarkable results. In some areas we have up to 80 percent reduction in bollworms.

And so this year we plan to increase that. In fact, we have what we call an areawide pest management project that will go on in Mississippi this year that will involve more than 200,000 acres. If you can take care of these things on a wide basis like this, you accomplish what I said—you do not have spray chemicals.

So that is our technology, and we think we have the tools now to accomplish it. And if we can, it will give farmers another method to reduce their costs of chemicals and also we will have a more friendly environment. We think that is all good.

Senator COCHRAN. I do, too. I was going to ask you a question about boll weevil research and how much you were spending on that and where you were spending it. Is it included in this integrated pest management activity?

Dr. PLOWMAN. Yes; it is included in our integrated pest management.

Senator COCHRAN. But you do have a robust program of research in boll weevil eradication.

Dr. PLOWMAN. Yes; we have a robust program. That is for sure. We have had one at Mississippi State for many, many years and they have developed a lot of technologies—the bait stick, for example, that we talked about at this hearing in other years. So that is all good.

We will spend in the 1995 budget a little better than \$3 million for research on the boll weevil.

Dr. HORN. I could add to that. For research and education within CSREES this year there would be \$266,000, and another \$1,466,000 in Extension. The significant part of the money of course comes with APHIS and they are spending about \$18 million in this fiscal year.

Dr. PLOWMAN. The eradication program involves both ARS and APHIS, and involves the State departments of agriculture and the State universities, so it is a very well managed program and has had tremendous success.

Senator COCHRAN. I guess the bottom line is, what effect does all of this have on production and efficiency of production.

Dr. PLOWMAN. [Indicating upward.]

Senator COCHRAN. It moves it upward and enlarges our market share in terms of our share of the world market. And we have seen cotton prices really going up.

Dr. PLOWMAN. This year, it is estimated that we will export about \$48 billion of agricultural products. Now that did not just happen. It happened because we have the technology to be efficient in production and have these crops and products to export.

Senator COCHRAN. That is a good argument we can make when people start nitpicking the budget and trying to zero out line items when we have the bill on the floor. We need this information. This is good information to have so that we can defend these requests. I think they are legitimate requests too. And maybe in some areas you are not asking for enough.

FOOD SAFETY RESEARCH

I wonder about the food safety area, for example. I know you do have some research going on and there has been a lot of concern about our ability to bring modern technology to bear on the detection of bacteria and other contaminants in beef and poultry. We are still locked into an inspection system though that pretends that you can look at something and find that and tell whether or not it is going to be unhealthy.

But we do have some new research findings in that area and I know that it is a priority in your budget request. What level of funding is required to do the job, in your opinion?

Dr. PLOWMAN. Well, you never have enough. But we have put significant effort and new resources into the whole food safety issue in the last couple of years. In the 1996 budget proposal we would count about \$50.6 million directed toward food safety issues. We have that in both preharvest, looking at food safety issues on the farm, as well as the postharvest activities.

This last year, I think we have done two or three things that will have a major impact. For example, one of the reasons that it has been so difficult in packing plants to determine if we have bacteria or other pathogens is that you cannot see them. And the way those things are processed, you cannot swab every bird or every carcass and then wait 24 hours for a plate test to tell you if you have pathogens. We would have to have 10,000 more warehouses to handle these carcasses.

One of the things we have been trying to do is develop a very rapid test, and we have succeeded in doing that for both swine and for beef carcasses. We can tell now in 5 minutes instead of 24 hours if we have bacteria on the carcasses. These technologies will be used to help monitor what is going on and they will supplement any of the visual inspections. As we develop these kind of tools, we will eliminate the visual inspections and rely on more precise methods of determining whether you have bacteria and pathogens.

We are now trying to adapt these same kind of tests to the poultry processing lines because they even go faster. And we are looking at other technologies to mitigate the Salmonella problems in the growing phase of chickens as well as other methods to sanitize the birds in the slaughter plant. It is a very active and important part of our program.

Senator COCHRAN. I appreciate very much that information. Dr. Carlson, is anything going on in CSREES on this subject?

Dr. CARLSON. The main effort is in the National Research Initiative and there is about \$5.5 million in that. However, \$3.9 million in research formula funds and grant funds also support food safety research. That, of course, is developing much of the very basic research that is essential to get to the point where these things can be controlled. So it all kind of ties in together. All are needed. We are all tied together in trying to solve this situation.

PESTICIDE APPLICATOR TRAINING

Senator COCHRAN. Last year the budget request included \$2 million for pesticide applicator training and we did not provide the funds requested. That is in the budget again this year, your budget request, for \$2 million. Why is this considered to be a priority for funding? This does not have anything to do with food safety; I have jumped back to the issue of pesticide training.

Dr. CARLSON. The pesticide applicator training is a program that is and has been in Extension for a number of years. I do not have it right in front of me, but in the past years, this program has been supported through funds from EPA and were using the Extension method of getting out to the people and training the people, the applicators, both the professional and also on the farm. This year those funds are not available, as I understand, and that is why we are requesting them.

Dr. HORN. And there is a law that EPA manages that says these people do have to receive training.

SUSTAINABLE AGRICULTURE

Senator COCHRAN. You have these worker standards that EPA has promulgated, and we have been wrestling with them over the

content of some of those regulations and what they mean. Well, let me ask you another question.

I understand the integrated pest management initiative. Why do we need extra money for something called sustainable agriculture? You have \$3.46 million currently available for that. There is a request for an additional \$1.5 million for the next fiscal year. What do you do with that money, and is this critical?

Dr. CARLSON. I would like to call upon Dr. Walter Woods who has this program within his area of partnerships within the Cooperative State Research, Education, and Extension Service. It involves both extension and research. Dr. Woods, if you would.

Dr. WOODS. Thank you, Mr. Chairman. I am pleased to respond to that particular question. As you look at the sustainable agricultural programs, there are a number of aspects that I think are of particular interest that make these programs very critical at this moment in time.

One of those is a significant portion of this activity is moved out to the region that is managed by farmers as well as the university scientists and other people who have an interest in the program. There are farmer research initiatives on their part where the research is actually done on and by the farmers themselves to bring about those types of activities, which I think is consistent with the goal to make agriculture very sustainable and to have minimal impact upon the environment.

This program has been identified as a very critical and important program.

Senator COCHRAN. I know it is real popular right now. Everybody thinks that is the answer to solving all the problems that we have. You just say sustainable agriculture and that wins applause. I just wondered what you were doing with the money. Can you tell me what they do? [Laughter.]

Dr. WOODS. Well, I can do it in part and give you a more detailed report later than I can give right here verbally.

No. 1 is that they are doing a lot of different research programs in cooperation that have been identified by farmers, ranging everywhere from effective use of animal waste to different cropping practices, to cultural practices on the part of the various crops that are involved across the countryside to try to enhance the opportunity for the profitability of those people involved in those crops and those livestock enterprises.

[The information follows:]

SUSTAINABLE AGRICULTURE

CSREES has a focused effort in sustainable agriculture through funding for the Sustainable Agriculture Research and Education [SARE] program and the Sustainable Agriculture Technology Development and Training Program [SATDTP]. Both programs award competitive grants through a regional structure, with recommendations on funding made by regional councils. These councils include scientists, producers, non-profit and agribusiness representatives, and agency staff. The SARE program funds primarily research projects, most of which include an outreach component. Part of the SARE program funding is used to match funds from the Environmental Protection Agency [EPA] for the Agriculture in Concert with the Environment [ACE] program. ACE research and education funds are also competitively awarded through the regional councils. The SATDTP effort is the newest program, and is providing support for Extension workshops, videos, curricular materials, and strategic planning activities.

The funds support research and extension programs at regional levels, university research and extension projects, farmer initiated grants, National Agricultural Library for a sustainable agriculture reference base, special projects, and the Sustainable Agriculture Network.

SUBMITTED QUESTIONS

Senator COCHRAN. OK. There are a lot of other questions that I have and we have been here a couple of hours, which is probably as much as any of us ought to be able to stand, so I am going to recess the hearing with my appreciation to all of you for your cooperation and for being here today to help us understand the budget request.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

AGRICULTURAL RESEARCH SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

RESEARCH CLOSURES AND CONSOLIDATIONS

Question: Of the twelve locations proposed for closure, ten are research locations that the Administration proposed to close in fiscal year 1995 and the Committee directed remain open for an additional year for further evaluation. Please submit the further studies completed by the ARS on these ten facilities.

Answer: Following instructions from Congress to evaluate, during the 1995 year, each of the nine locations saved from closure during the FY 1995 budget deliberations, ARS initiated the evaluation process in November 1994. However, given the FY 1996 budget proposal which call once again for closure of the nine locations, plus three others the requested reevaluations have been placed on hold pending the outcome of the 1996 Appropriation Act. ARS did begin one onsite evaluation at the Sidney, Montana, location. The evaluation completed at Sidney, Montana entailed an onsite review that included ARS program and budget officials, Sidney scientists and other staff, ranchers and other users, and university and other cooperators. Project reports were delivered by each scientist on their research objectives, accomplishments, and future plans. Program needs and research priorities were discussed by users and cooperators. However, the ARS did not go further with this review and reconsider the rationale for the recommendation to close the facility.

Question: How much does ARS expect to incur in laboratory closing costs in FY 1996?

Answer: The current estimate of location closure costs for FY 1996 is \$8.3 million. This is a one-time cost.

Question: How would such costs be financed?

Answer: These costs would be financed by salary lapse funds. This is consistent with the manner in which the FY 1995 closure costs were funded.

Question: What criteria were used by ARS to decide which locations would be proposed for closure?

Answer: The criteria and factors considered to identify the locations proposed for closure include: physical condition of facilities; critical mass of scientific talent; support for USDA Action Agencies; relevance to national priorities; similar programs at other locations; response to research needs of a broad array of customers and users; and orientation to national problems versus State/Local problems.

Question: Please submit for the record the findings based on the application of these criteria to each of the facilities proposed for closure.

Answer: The justification for the ARS laboratories proposed for closure in FY 1996 is submitted for the record.

Brawley, California--Natural Resources and Crop Production. Brawley serves primarily as a staging area for field work in soil and water management, entomology, and crop production directed from other ARS laboratories, such as Riverside, Fresno, and Salinas, California; and Phoenix, Arizona. Much of the work at Brawley is directed at unique problems in one local area of California. To the extent necessary, field work can be continued in the Imperial Valley from remote locations without maintaining the Brawley facility.

Miami, Florida--Subtropical Horticultural Research. The Subtropical Horticultural Research Laboratory in Miami has two distinct programs: acquisition, maintenance, and distribution of subtropical and tropical germplasm of agricultural importance; and development of technologies to maintain quality and eliminate quarantine barriers for subtropical and tropical fruits and vegetables. Available operating funds at this location are far below Agency standards and requirements.

Subtropical and tropical fruit orchards in the South Florida areas were severely damaged by Hurricane Andrew and reestablishment of fruit production in this area in the long term is questionable. The hurricane also damaged the Miami facility. The extensive repairs required are not deemed cost beneficial to Agency programs and the public. Additionally, unrelenting urban encroachment dictates consolidation of these activities at other relevant ARS locations. Transfer of the germplasm program to ARS facilities at Mayaguez, Puerto Rico, and Hilo, Hawaii will consolidate appropriate conservation programs, increase management efficiency, and eliminate the possibility of frost damage to temperature sensitive materials. Other research programs at the Miami laboratory will be transferred to ARS' Orlando, Florida facility. Essential quarantine research programs will be carried out in Weslaco, Texas and Fresno, California.

Houma, Louisiana--Sugarcane Research. Research at Houma is exclusively on the breeding and culture of sugarcane. Emphasis is on the development of new improved varieties, the use of genetic engineering procedures to introduce new genes or genetic material into existing varieties, control of weed populations, and improved methods of insect and disease control. Research at Houma has been very successful and the yield of sugar per acre has increased fourfold through use of ARS varieties. ARS has released 30 new varieties over the last 13 years, some of which have been jointly released with the Louisiana State University and the American Sugarcane League. Inasmuch as all the research now conducted at Houma exclusively benefits the Louisiana sugarcane industry, it is not an appropriate Federal role. ARS research on genetic resource maintenance and improvement of sugarcane will continue at Canal Point, Florida for the benefit of the nationwide industry, including that in Louisiana.

Orono, Maine--Potato Research. ARS' research at Orono deals with crop and soil management impacting potato production, principally the locally-based potato industry. Although this production area serves national markets, the most important research contributed by ARS is the genetic improvement of potatoes to resist plant diseases. ARS will continue to supply this important technology to the Maine potato industry from existing national programs at Beltsville, Maryland and Madison, Wisconsin. ARS will maintain in Maine a field evaluation site to test new improved potato varieties and other germplasm lines for resistance to plant diseases. In this way, the most important technological needs of the Maine potato industry will continue to be met by ARS. The research to be terminated is deemed to be less critical given the constrained budget climate under which the Federal government must now operate.

East Grand Forks, Minnesota--Potato Research. The Potato Research Laboratory at East Grand Forks has successfully resolved postharvest handling and storage issues. Current research emphasis is on variety evaluation for end use quality, and identification of biorational means for controlling sprouting. The latter research is also addressed at the Agency's Northern Crop Science Laboratory in Fargo, North Dakota, where there is a critical mass of scientific disciplines lacking at the East Grand Forks location. Operating funds at East Grand Forks are minimal, and ARS does not have sufficient resources to provide additional support.

Sidney, Montana--Sustainable Farming Systems. ARS' mission at Sidney is to develop sustainable farming systems, and dryland and irrigated crop production for the Northern Great Plains. As a satellite site from Bozeman, the laboratory is also actively working on biocontrol of leafy spurge and other range weeds. The laboratory has made significant contributions over the years to water conservation, erosion control, and crop production. However, similar work is carried out at Bozeman, Montana; Mandan, North Dakota; Cheyenne, Wyoming; and Akron, Colorado. ARS can serve the needs of the Northern Plains effectively from these remaining four locations.

Reno, Nevada--Landscape Ecology Research. The research at Reno addresses the landscape ecology of the intermountain region of the western rangelands. The research to be terminated has been determined to be less critical given the constrained research budget climate under which the Federal government must now operate. The other relevant range research being conducted by ARS at Burns, Oregon and Logan, Utah will continue to address the most critical technical issues associated with resource conservation and forage production on public and private rangelands. There is no ARS real property resource associated with the research program at Reno. All research is carried out in cooperator's facilities and on public lands.

Chatsworth, New Jersey--Blueberry and Cranberry Research. Research at Chatsworth is on the breeding of blueberries, and on improved methods of disease control in blueberries and cranberries. Excellent progress has been made; both the blueberry and cranberry industries are thriving and expanding. To a large degree, many of the original objectives of this research have been accomplished. ARS has introduced 51 new improved varieties of high bush blueberries over the last 50 years, and these are mainly tolerant of major diseases. Largely through ARS research, disease problems of cranberries are now greatly reduced. Since the cranberry and blueberry industries are thriving and these crops are major agricultural industries in New Jersey, it is appropriate for the industries themselves and the State to continue whatever research may be required in the future. Blueberry breeding will continue at Beltsville, Maryland, and the National Blueberry Repository will continue to be maintained at Corvallis, Oregon.

El Reno, Oklahoma--Soil/Forage/Animal Systems Research. The mission of the Grazinglands Research Facility at El Reno is to increase the efficient production of lean red meat from forages by increasing the quantity and quality of forages. A soil/forage/animal systems research approach to meat production is the main research emphasis at El Reno. Facilities are old and badly in need of upgrading and modernization, especially the feedlots, fences, and other infrastructure. Similar research is being conducted by ARS at Clay Center, Nebraska and Miles City, Montana. The research programs at these locations can meet the research needs of clients located in different ecological production areas of the country.

Clemson, South Carolina--Cotton Fiber Quality Research. The ARS program at Clemson is devoted to two aspects of cotton quality research: identification and elimination of the causative agent of byssinosis, a worker safety issue; and development of an automated, objective system for grading cotton. The High Volume Instrumentation (HVI) developed by this laboratory is now the standard for grading all U.S. cottons. This project, and the byssinosis project which has met essentially all of its objectives, will be terminated. Two other projects that provided support for further development of methods for assessment of cotton fiber performance and end-use quality will be consolidated with programs at the Southern Regional Research Center, New Orleans, Louisiana, to increase program emphasis on this important issue. This consolidation is deemed essential given the constrained budget climate under which the Federal government must now operate. The cooperator space currently occupied by ARS will revert back to Clemson University.

Jackson, Tennessee--Soybean Research. The current research objectives at Jackson are to evaluate enhanced soybean germplasm with resistance to the cyst nematode, and to study the influence of resistant germplasm on the development of new pathogenic races of the nematode. This research has been very successful but there is now a need to close this facility. It is more appropriate to conduct the research at Stoneville, Mississippi where there is an existing research program on breeding improved soybean varieties for the mid-south region.

Brownwood, Texas--Pecan Research. The objective of the research at Brownwood is to evaluate pecan germplasm and introduce new varieties. This research has been very productive. ARS has introduced 19 new improved varieties which are now widely grown throughout the pecan belt. About 32 percent of the U.S. pecan crop is produced from native seedling trees. With the availability of existing improved varieties and the lack of expansion of plantings of improved varieties in the U.S., the future need for additional improved varieties is not considered of high national priority. In view of the need to direct resources to other agricultural problems of higher national priority, there is now a need to discontinue the pecan research at Brownwood. The collection of unique pecan germplasm now located at Brownwood will be transferred to ARS' College Station, Texas facility. ARS will maintain national pecan management and culture research at Byron, Georgia.

Question: Please identify specific research projects and numbers of employees impacted at each location proposed for closure.

Answer: The specific research projects and numbers of employees impacted at each location proposed for closure will be provided for the record.

FY 1996 LOCATION CLOSURES

<u>Location</u>	<u>Project Title</u>	<u>FTE</u>
Brawley, CA	Irrigated Desert Research - Soil and Water Management, Salinity Control and Abatement, Field Crop Genetics and Production, and Pest Management	4
Miami, FL	Development of Systems Approach and Quarantine Treatments for Fruit Fly Control in Subtropical and Tropical Fruits	31
	Development of Non-Chemical Alternative Treatments for Horticultural Pests of Quarantine Significance	
	Maintaining Postharvest Quality and Reducing Decay Losses of Subtropical Fruits and Vegetables	
	Introduction, Preservation, Distribution, and Evaluation of Tropical and Subtropical Fruit and Ornamental Plants	
	Improvement of Tropical and Subtropical Fruit Crops	
	Maintain and Evaluate Germplasm in the World Collection of Sugarcane and Related Grasses	
Houma, LA	Developing Principles and Systems of Weed Control and Cultural Practices for Sugarcane Production	33
	Improving Sugarcane Productivity by Conventional and Molecular Approaches to Genetic Development	
	Disease and Insect Control Mechanisms for the Enhancement of Sugarcane Germplasm Resistance	
Orono, ME	Alternative Cropping Systems for Efficient Nitrogen Use and Pathogen Management	11
	Generalized Crop Systems Model for New England	
	Soilborne Pathogens	
East Grand Forks, MN	Identifying/Controlling Key Processes Degrading Potato Quality and Impeding Domestic/Export Markets	5
	Decision Support to Enhance Potato Storage and Processing Management and Minimize Quality Losses	
	Market Quality Assessment for Improved Cultivars	
Sidney, MT	Management Practices and Alternative Crops to Optimally Use Precipitation	13
	Biological Control of Leafy Spurge	
Reno, NV	Conservation Biology of Rangelands	8
Chatsworth, IL ²	Development of Vaccinium Germplasm for Improved Disease Resistance (Blueberry/Cranberry)	4

FY 1996 LOCATION CLOSURES (Continued)

<u>Location</u>	<u>Project Title</u>	<u>FTE</u>
El Reno, OK	Soil Degradation and Improvement on Grazed Lands	22
	Integration of Plant Resources into Sustainable Forage Systems for the Southern Great Plains	
	Development of Sustainable Grazing Systems in the Southern Great Plains	
	Evaluation of Animal Genetic and Forage Resources for Production of Quality Lean Meat	
Clemson, SC	Elimination of Environmental and Water Safety Hazards Caused by Contaminants in Commercial Cotton	30
	Improved Instrument Systems for Use in Cotton Marketing	
Jackson, TN	Development of Host Resistant Germplasm to Manage Soybean Cyst Nematodes	2
Brownwood, TX	Pecan Genetics and Improvement	11
	Development of Genetic Resistance to Diseases and Insects in Pecan	

Question: What ARS research closures and consolidations are taking place in fiscal year 1995?

Answer: The ARS research closures taking place in fiscal year 1995 will be provided for the record.

FY 1995 Location Closures

Fairbanks, Alaska
 Pasadena, California
 Georgetown, Delaware
 Savannah, Georgia
 Lexington, Kentucky
 Oxford, North Carolina
 Delaware, Ohio
 Lewisburg, Tennessee
 Suffolk, Virginia
 Rotterdam, The Netherlands

Funds were redirected from Pasadena, California to Fresno for research on methyl bromide alternatives; to Salinas for research on vegetable production; and to Albany for research on citrus quality and production. Funds also were redirected from Savannah, Georgia to consolidate research at Fresno on methyl bromide alternatives; to Manhattan, Kansas for research on grain quality and insect control in stored grain; and to Gainesville, Florida for research on insect control in packaged products.

Question: How much did ARS incur in closing costs in FY 1995?

Answer: The total estimated FY 1995 closure costs by location is provided below:

<u>LOCATION</u>	<u>AMOUNT</u>
Rotterdam, The Netherlands	\$ 200,000
Delaware, Ohio	625,646
Georgetown, Delaware	206,932
Pasadena, California	1,063,298
Fairbanks, Alaska	366,525
Lewisburg, Tennessee	10,025
Lexington, Kentucky	464,579
Savannah, Georgia	1,902,278
Oxford, North Carolina	476,138
Suffolk, Virginia	<u>201,784</u>
Total	5,517,205

Question: What is the status of the 1995 laboratory closures?

Answer: All personnel have been reassigned to their new duty stations and relocations of their households are in progress. As of March 5, 1995, all personnel that remained at the sites to monitor closure activities at Fairbanks, AK, Oxford, NC, Delaware, OH, Lewisburg, TN, Suffolk, VA, and Rotterdam, Netherlands, have departed. There are three employees remaining at Savannah, GA, who are coordinating the removal of the irradiator at the site. One employee remains at Lexington, KY, to handle the disposal of chemicals. The employees at Pasadena, CA, and Georgetown, DE, (one at each site) will remain until the space transfers are completed. All employees are scheduled to depart by April 30, 1995.

Question: Please explain what happened to buildings and facilities being vacated by ARS.

Answer: Of the nine locations identified for closure in FY 1995, two sites, Fairbanks, Alaska, and Lexington, Kentucky, did not have Federally-owned real property. The 4.32 acres and 19 buildings at Oxford, NC, have been transferred by the Department to the USDA, Animal and Plant Health Inspection Service. The four buildings at Delaware, Ohio, are being transferred by the Department to the Forest Service. As required by Federal regulations, the six buildings at Georgetown, Delaware, have been reported to the General Services Administration (GSA) for disposal. In addition, the land and facilities at the remaining four locations will be reported to GSA following completion of our Environmental Assessments and cleanup operations.

Question: What savings, if any, are included in the fiscal year 1996 budget for fiscal year 1995 research closures and consolidations?

Answer: The savings generated from the closure of 10 ARS locations in FY 1995, which amounted to \$8.4 million, is being utilized by the Agency to finance unfunded Congressional program increases provided in FY 1995 i.e., Arkansas Children's Hospital Research Institute, Human Nutrition Delta Initiative, Appalachian Soil and Water Conservation Research Laboratory, Beckley, West Virginia, Corn Germplasm Base Enhancement, Ethanol Engineering Study, Fish Farming Experimental Laboratory, Stuttgart, Arkansas, and Sweetpotato Whitefly research. The Agency also proposed the continuation of these programs in FY 1996.

Question: The Explanatory Notes refer generally to program terminations at a number of locations. Please detail specifically for the Committee all the locations and projects proposed for termination and the rationale for terminating each of these projects.

Answer: The rationale for terminating each project was based on the following criteria: (1) Physical condition of the facilities; (2) critical mass of scientific talent; (3) support for USDA Action Agencies; (4) relevance to National programs and priorities; (5) similar programs at other ARS locations; (6) ability to address research needs of all clients; and (7) ability to address national problems(s) versus State/Local problem(s). The locations and projects proposed for termination will be provided for the record.

**Agricultural Research Service
FY 1996 Proposed Program Reductions and Location Closures**

Location**Project Title****CALIFORNIA****Base program reductions**

Albany	Pest Management Control of Yellow Star Thistle
	Arthropods for Biological Control of Weeds
	Quality Assurance of Food Products from Livestock Grazing Rangeland Weeds

Location closure

Brawley	Irrigated Desert Research - Soil and Water Management, Salinity Control and Abatement, Field Crop Genetics and Production, and Pest Management
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COLORADO**Base program reductions**

Ft. Collins	Improvement of Postharvest Quality of Sugarbeets
	Database Management and Emphasis on Terrestrial Systems

FLORIDA**Location closure**

Miami 1/	Development of Systems Approach and Quarantine Treatments for Fruit Fly Control in Subtropical and Tropical Fruits
	Development of Non-Chemical Alternative Treatments for Horticultural Pests of Quarantine Significance
	Maintaining Postharvest Quality and Reducing Decay Losses of Subtropical Fruits and Vegetables
	Introduction, Preservation, Distribution, and Evaluation of Tropical and Subtropical Fruit and Ornamental Plants
	Improvement of Tropical and Subtropical Fruit Crops
	Maintain and Evaluate Germplasm in the World Collection of Sugarcane and Related Grasses

GEORGIA**Base program reductions**

Athens	Potential Use of Bioactive Proteins
	Biologically Active Compounds in Nicotiana Species and Selected Tobacco Cultivars
	Reproductive Physiology - Pollen-Pistil Interactions Leading to Fertilization

Tifton	Reduction of Synthetic Chemical Residues on Cured Leaf and Screening of Nicotiana Species for Potential
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1/ Research will be transferred to Orlando, Florida, to continue essential programs on developing alternatives to methyl bromide use; and to Mayaguez, Puerto Rico, to maintain the tropical/subtropical fruit and sugarcane germplasm.

LocationProject Title**HEADQUARTERS****Base program reductions**

Control of Perennial and Annual Weeds

Potato Aphid and Colorado Potato Beetle

HAWAII**Base program reductions**

Hilo

Molecular Approaches for Improvement of Sugarcane

Breed Improved Pineapple Cultivars

Develop Acceptable Methods of Control of Papaya
Ringspot Virus

Aquaculture Productivity Research

Technology Development for Increased Value
Products from Sugarcane**ILLINOIS****Base program reductions**

Peoria

Biotechnology Research and Development
Consortium-Animal HealthBiotechnology Research and Development
Consortium- Biotechnology

Plant Defense Via Lipoxgenase Pathway Enzymes

LOUISIANA**Location closure**

Houma

Developing Principles and Systems of Weed Control
and Cultural Practices for Sugarcane ProductionImproving Sugarcane Productivity by Conventional
and Molecular Approaches to Genetic DevelopmentDisease and Insect Control Mechanisms for the
Enhancement of Sugarcane Germplasm Resistance**LOUISIANA****Base program reductions**

New Orleans

Genetic Engineering of Fungal Phytase to Reduce
Groundwater Contamination by PhosphatePesticide Formulations for Protection of
Environmental Quality**MAINE****Location closure**

Orono

Alternative Cropping Systems for Efficient
Nitrogen Use and Pathogen Management

Generalized Crop Systems Model for New England

Soilborne Pathogens

LocationProject Title**MARYLAND****Base program reductions**

Beltsville	Ecology, Population Dynamics/Control of Tick Vectors in Areas of High Lyme Disease
	Systematics of Agriculturally Important Grasses Related to Sugarcane
	Remote Sensing and Associated Technologies for Production Decisions
	Integrated Management of Rhizotonia Seedling Disease in Alfalfa
	Determine Effect of Allelochemicals and Micro-organisms of Potato
	Pharmacokinetic Models for Persistent Toxic Chemicals in Farm Animals
	Identify Controlling Mechanisms Associated with Quality of Reduced Fat Meat Products
	Physical-Chemical Methods for Determining Antibiotic Residue in Tissues and Milk of Food Producing Animals
	Regulation of Gene Expression for Muscle Development in Turkeys

MICHIGAN**Base program reduction**

East Lansing	Sensor Modeling and Equipment to Minimize Handling Damage for Fruits and Vegetables
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MINNESOTA**Location closure**

E. Grand Forks	Identifying/Controlling Key Processes Degrading Potato Quality and Impeding Domestic/Export Markets
	Decision Support to Enhance Potato Storage and Processing Management and Minimize Quality Losses
	Market Quality Assessment for Improved Cultivars

Base program reduction

St. Paul	Genetic Manipulation Techniques in Rice and Oats
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MISSISSIPPI**Base program reduction**

Stoneville	Control Strategies for Insect Pests of Pecan
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MONTANA**Location closure**

Sidney	Management Practices and Alternative Crops to Optimally Use Precipitation
	Biological Control of Leafy Spurge

LocationProject Title**NEVADA****Location closure**

Reno	Conservation Biology of Rangelands
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NEW JERSEY**Location closure**

Chatsworth	Development of Vaccinium Germplasm for Improved Disease Resistance
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NEW YORK**Base program reductions**

Ithaca	Pest Management of Sugar Maples
	Develop Animal Models to Assess the Effect of Maternal Zinc Status on Neonate Skin Growth and Immune Function

NORTH CAROLINA**Base program reductions**

Raleigh	Impact of Environmental Factors and Genetic Variability of Photosynthesis
	Effects of Environment on Weed/Crop Competition and Competitive Ability
	Identifying Treatments to Reduce Pesticide Residues in Consumable Agricultural Products

OKLAHOMA**Location closure**

El Reno	Soil Degradation and Improvement on Grazed Lands
	Integration of Plant Resources into Sustainable Forage Systems for the Southern Great Plains
	Development of Sustainable Grazing Systems in the Southern Great Plains
	Evaluation of Animal Genetic and Forage Resources for Production of Quality Lean Meat

PENNSYLVANIA**Base program reductions**

University Park	Biochemical Determinants for Gametogenesis and Disease Resistance in Forage Species
Wyndmoor	Nutrient Uptake by Plant Roots from Soils

SOUTH CAROLINA**Location closure**

Clemson 2/	Elimination of Environmental and Water Safety Hazards Caused by Contaminants in Commercial Cotton
	Improved Instrument Systems for Use in Cotton Marketing

2/ Research on cotton fiber and quality; and spinning evaluations will be transferred to New Orleans, Louisiana.

LocationProject Title**TENNESSEE****Location closure**

Jackson Development of Host Resistant Germplasm to Manage Soybean Cyst Nematodes

TEXAS**Location closure**

Brownwood 3/ Pecan Genetics and Improvement

Development of Genetic Resistance to Diseases and Insects in Pecan

3/ The National Clonal Germplasm Repository for Pecans, Hickories, and Chestnuts will be transferred to College Station, Texas.

Question: Please identify ARS research locations closed since 1980.

Answer: The list of ARS research locations closed since 1980 will be provided for the record.

Location ClosuresClosedProposed

1980	Vernon, TX	1987	Chaing Mai, Thailand	1996	Brawley, CA
1980	El Paso, TX	1988	Minneapolis, MN	1996	Miami, FL
1980	Chickasha, OK	1988	Belle Glade, FL	1996	Houma, LA
1981	Bradenton, FL	1988	Nairobi, Kenya	1996	East Grand Forks, MN
1982	Jeanerette, LA	1988	Portland, OR	1996	Sidney, MO
1982	Crowley, LA	1988	New Brunswick, NJ	1996	Chatsworth, NJ
1982	Blacksburg, VA	1988	Lake Alfred, FL	1996	El Paso, OK
1983	Indio, CA	1988	Foteau, OK	1996	Jackson, TN
1983	Mission, TX	1990	Greenville, TN	1996	Brownwood, TX
1984	Chicago, IL	1991	Rome, Italy	1996	Reno, NV
1984	Gulfport, MS	1995	Fairbanks, AK	1996	Orono, ME
1984	Meridian, MS	1995	Pasadena, CA	1996	Clemson, SC
1985	Natick, MA	1995	Georgetown, DE		
1985	Brownsville, TX	1995	Savannah, GA		
1985	Palmer, AK	1995	Lexington, KY		
1986	Knoxville, TN	1995	Oxford, NC		
1986	Vincennes, IN	1995	Delaware, OH		
1986	Pichmond, VA	1995	Lewisburg, TN		
1986	Otis AFB, MA	1995	Suffolk, VA		
1986	Rio Pedras, EP	1995	Rotterdam, The Netherlands		
1986	Denver, CO				
1986	Lake Charles, LA				

Question: In recent years, I am told that the ARS has developed several alternative plans which would propose to reduce the number of regional headquarters locations, including possible elimination of the Midsouth Research Center at Stoneville, Mississippi. What is the current status of any such plan and does the agency plan to advance a regional reorganization and relocation plan in the foreseeable future?

Answer: ARS does not have a long-range plan to reduce the number of Area Offices or the research program at Stoneville, Mississippi. However, as the current National Performance Review process evolves, and if future budget and personnel constraints and allowances require streamlining, ARS may propose the closure of some administrative offices to reduce overhead costs and save FTE in order to minimize impacts on the research program.

Question: I also understand that the staff of the ARS has been working on a plan to reduce administrative staff in Washington and adjacent headquarters locations. Also, it has been mentioned that ARS headquarters might increase its delegation of authority to field offices and laboratories. Would you please explain if anything has been done relative to such a plan and what future actions you might have for any such reductions or changes in procedures related to the delegation of authority.

Answer: Consistent with the administration and NPR goals, ARS has projected reductions in the Washington Metro area administrative staff as part of the Agency's overall FTE streamlining plan to be accomplished by FY 1999.

The four previous administrative management units of the Agricultural Research Service, the National Agricultural Library, the Extension Service, and the Economics Management Staff will be consolidated to form the Administrative and Financial Management organization under ARS as the lead agency for the REE mission area. This consolidation is targeted for completion by April 30, 1995.

Increased delegations of authority to field offices and laboratories will be implemented where it can improve customer service. Planned actions include issuance of credit cards and utilization of third party draft procedures for small purchasing by nonprocurement personnel, use of the OPM Demonstration Project authority by field offices in expediting personnel processing, and implementation of Employee Express to provide employees capability to process selected payroll/personnel actions directly. Additional delegations of authority will be implemented as regulatory reform, business process change, and the application of new technology permit.

RESEARCH LOCATIONS/STAFFING

Question: Please identify those locations where you are currently operating research programs.

Answer: A list of current ARS research locations will be provided for the record.

ARS RESEARCH LOCATIONS

STATE	LOCATION	STATE	LOCATION	STATE	LOCATION
AL	Auburn	IL	Peoria	OK	Durant
AR	Booneville		Urbana		El Reno
	Fayetteville	IN	West Lafayette		Lane
	Pine Bluff	KS	Manhattan		Stillwater
	Stuttgart	LA	Baton Rouge		Woodward
AZ	Phoenix		Houma	OR	Burns
	Tucson		New Orleans		Corvallis
CA	Albany	MA	Boston		Pendleton
	Brawley	MD	Beltsville	PA	Philadelphia
	Davis		Frederick		University Pk
	Fresno		Hyattsville	PM	Panama City
	Riverside		Princess Anne	PR	Mayaguez
	Salinas	ME	Orono	SC	Charleston
	San Francisco	MI	East Lansing		Clemson
	Shafter	MN	E.Grand Forks		Florence
CO	Akron		Morris	SD	Brookings
	Fort Collins		St. Paul	TN	Jackson
DC	Washington, D.C.	MO	Columbia		McMinnville
DE	Newark	MS	Ms. State	TX	Beaumont
FL	Brooksville		Oxford		Brownwood
	Canal Point		Poplarville		Bushland
	Fort Lauderdale		Stoneville		College Sta.
	Gainesville	MT	Bozeman		Houston
	Miami		Miles City		Kerrville
	Orlando		Sidney		Lubbock
	Winter Haven	NC	Raleigh		Temple
GA	Athens	ND	Fargo		Weslaco
	Byron		Grand Forks	UT	Logan

	Dawson		Mandan	VI	St.Croix
	Griffin	NE	Clay Center	WA	Prosser
	Tifton		Lincoln		Pullman
	Watkinsville	NJ	Chatsworth		Wenatchee
HI	Hilo	NM	Las Cruces		Yakima
IA	Ames	NV	Reno	WI	Madison
	Ankeny	NY	Geneva	WV	Beckley
ID	Aberdeen		Ithaca		Kearneysville
	Boise		Orient Point	WY	Cheyenne
	Dubois	OH	Columbus		Laramie
	Kimberly		Coshocton		
			Wooster		
	International				
	Buenos Aires, Argentina				
	Montpellier, France				

Question: Identify those locations which are co-located with university laboratories.

Answer: The locations that are co-located with University laboratories are listed below.

Alabama, Auburn
 Arizona, Phoenix
 Arkansas:
 Fayetteville
 Stuttgart
 California:
 Davis
 Riverside
 Shafter
 Colorado, Ft. Collins
 Florida:
 Ft. Lauderdale
 Gainesville
 Georgia:
 Athens
 Griffin
 Tifton
 Hawaii, Hilo
 Idaho, Aberdeen
 Illinois, Urbana
 Indiana, W. Lafayette
 Iowa, Ames/Ankeny
 Louisiana, Baton Rouge
 Mexico, Tuxla Gutierrez
 Michigan, East Lansing
 Minnesota, St. Paul
 Mississippi, Mississippi State
 Missouri, Columbia
 Montana, Bozeman
 Nebraska:
 Clay Center
 Lincoln
 Nevada, Reno
 New Mexico, Las Cruces
 New York, Ithaca
 North Carolina, Raleigh
 North Dakota, Fargo
 Ohio:
 Columbus
 Wooster

Oregon:
 Burns
 Corvallis
 South Carolina:
 Clemson
 Florence
 Tennessee, Jackson
 Texas, Beaumont
 Utah, Logan
 Washington:
 Prosser
 Pullman
 Wisconsin, Madison
 Wyoming, Laramie

Question: Identify those locations where you have 10 or less scientific capacity.

Answer: The locations that have 10 or less scientific capacity are listed below.

<u>LOCATIONS</u>	<u>TOTAL SCIENTIFIC CAPACITY</u>
California:	
Brawley	9
Delaware:	
Newark	9
Florida:	
Brooksville	8
Canal Point	8
Georgia:	
Griffin	9
Idaho:	
Aberdeen	9
Louisiana:	
Houma	8
Mexico:	
Tuxla-Gutierrez	6
Minnesota:	
E. Grand Forks	6
St. Paul	9
Mississippi:	
Popularville	5
Missouri:	
Columbia	9
Nebraska:	
Lincoln	5
New York:	
Geneva	5
Ohio:	
Coshocton	6
South Carolina:	
Clemson	5
Texas:	
Beaumont	3
Brownwood	3
Virgin Islands:	
St. Croix	2
TOTAL	124

Question: How many scientists does ARS currently have on-board? Please identify the major disciplines involved. Have there been any significant changes in disciplines over the past fifteen years? What role are post-doctoral appointments playing in your management and program plans?

Answer: ARS currently has 1,913 permanent career scientists on board, plus about 100 positions vacant. The total number of scientists has declined during the past fifteen years due to sharply increasing operating costs. Disciplines associated with the crop and animal production have declined, while those

associated with human nutrition and post-harvest technologies have remained the same or increased. ARS uses post-doctoral scientists on temporary appointments to complement permanent scientists on board. The post-doctoral scientists are assigned specific programmatic objectives as part of larger research efforts in a specific program area. A listing of disciplines follows:

<u>Discipline</u>	<u>Number SY</u>
Agricultural Engineering	110
Agricultural Marketing	2
Agronomy	59
Animal Science	52
Biomedical Engineering	2
Botany	15
Chemical Engineering	19
Chemistry	315
Civil Engineering	24
Computer Science	2
Dietician and Nutritionist	4
Ecology	10
Economist	1
Electrical Engineering	1
Electronics Engineering	3
Entomology	253
Food Technology	27
General Biological Science	33
General Engineering	1
General Physical Science	5
Genetics	180
Geology	2
Horticulture	34
Hydrology	16
Materials Engineering	2
Mathematical Statistician	1
Mechanical Engineering	3
Medical Officer	1
Meteorology	3
Microbiology	141
Pharmacology	3
Physics	7
Physiology	63
Plant Pathology	132
Plant Physiology	184
Psychology	1
Range Conservation	20
Soil Science	131
Textile Technology	3
Veterinary Medical Science	39
Zoology	<u>9</u>
Total:	1,913

MANAGEMENT COSTS

Question: How much will ARS expend for management costs in FY 1995. Does this correspond to your 10 percent program assessment?

Answer: The FY 1995 management costs for ARS is \$66,432,760 which corresponds to the 10 percent program assessment.

Question: Describe your management costs and FTE's by function and location for FY 1995.

Answer: The ARS management costs include Agency program management, technology transfer coordination, human resource management, financial management, extramural agreements, procurement and property management, administrative and research information services, and facilities management. The following represents the breakdown of management costs by function, location, and FTE.

<u>Function</u>	<u>Location</u>	<u>FTE</u>	<u>Est. Cost in Millions</u>
Office of the Administrator	Washington, DC	239.5	\$30.9
Area Program and Administrative Management	Beltsville, MD	54.8	2.9
	Philadelphia, PA	31.2	1.7
	Peoria, IL	32.5	1.8
	Albany, CA	38.1	2.2
	Ft. Collins, CO	32.1	1.9
	Stoneville, MS	26.8	1.6
	College Station, TX	28.6	1.5
	Athens, GA	31.5	1.8
Deputy Administrator for Administrative and Financial Management	Washington, DC Metro Area	339.0*	20.1

*Includes 14 FTE to be transferred to the Department for the Radiological Safety Program.

Question: What are your projected management costs and FTE's for FY 1996?

Answer: Given the projected flat budget for FY 1996, we expect a similar level of cost as in FY 1995, for FY 1996. However, our streamlining initiatives reflect an anticipated reduction of 7 FTE and associated cost.

REORGANIZATION

1. Under the recent Reorganization, ARS is charged with carrying out administrative support for the Cooperative State Research, Extension, and Education Service (CSREES), Economic Research Service and the National Agricultural Statistical Service.

Question: (a) Will these services be handled through a permanent fund transfer?

Answer: No, these services will be handled through annual reimbursable arrangement with each agency.

Question: Have the administrative personnel been transferred to ARS?

Answer: No, however, we have been involved in transitioning staff over the last 3 months and the personnel and payroll transfers will be official as of April 30, 1995.

Question: We note no corresponding increase in ARS personnel ceiling. Please explain.

Answer: There is no corresponding increase in personnel ceiling for ARS because the FTE are considered reimbursable and will be retained by the agencies serviced. We may reevaluate this in subsequent fiscal years.

Question: (b) In previous years, the Economics Management Staff was supported indirectly from appropriations to the Economic Research Service and the National Agricultural Statistics Service. Will these agencies receive similar services under ARS?

Answer: Yes, each agency will receive comparable services that were provided by the Economics Management Staff.

Question: Will these agencies continue to be charged in the same manner?

Answer: Yes, the agencies will be charged on a reimbursable basis for administrative and financial management support provided.

Question: How much will each be assessed in FY 1995 and FY 1996?

Answer: Assessments for FY 1995 were \$3.3 million per agency. This was based on the funding levels provided to Economics Management Staff. FY 1996 levels are yet to be determined, but will be on par with the FY 1995 levels, adjusted for annual salary increases and streamlining initiatives.

Question: How many FTE's correspond to these charges?

Answer: During FY 1995, 108 positions will be transferred to the new AFM organization. This includes full-time, part-time, vacant, and temporary positions. FY 1996 staffing levels have not yet been determined.

Question: (c) In FY 1995 and FY 1996, what will CSREES be assessed for services?

Answer: The FY 1995 assessment for CSREES will be \$2.2 million which was based on their former FY 1995 administrative and financial management budget. The FY 1996 assessment for CSREES has yet to be determined, but will be on par with the FY 1995 level adjusted for annual salary increases and streamlining initiatives.

Question: How many FTE's correspond to these assessment charges?

Answer: During FY 1995, 48 positions will be transferred to the new AFM organization. These include full-time, part-time, vacant, and temporary positions. FY 1996 staffing levels have not yet been determined.

Question: We are seeking the real savings to be achieved under the reorganization. How much will the reorganization save in management costs and FTE's in FY 1996? Please provide a management cost and FTE comparison by agency for all agencies combined under the Research, Education and Economics mission area for fiscal years 1994-1996.

Answer: Provided below is a table identifying FTE contributions to Administrative and Financial Management (AFM) for each component agency of the Research, Education and Economics mission area from fiscal year 1993 (the baseline for the streamlining plan) to fiscal year 1996. In fiscal years 1995 and 1996 there will not be significant cost savings because all employees have been placed in the new organizational structure. There will be an opportunity for greater FTE reductions and cost savings in the out years.

**Contributions to Administrative and Financial Management
(AFM) -- FTE Reductions By Agency:
FY 1993 Baseline to FY 1996**

	<u>FTE</u> <u>FY-93</u>	<u>FTE</u> <u>FY-94</u>	<u>FTE</u> <u>FY-95</u>	<u>FTE</u> <u>FY-96</u>
ARS	336	332	325	318
CSREES	43	41	41	39
ERS	61	60	59	58
NASS	<u>62</u>	<u>61</u>	<u>60</u>	<u>59</u>
TOTAL, AFM	502	494	485*	474*

*Reflects tentative planning information to be adjusted with actual as known.

Question: On a comparable basis, please identify by grade the number of positions of GS-12 and above, including SES positions, designated under management for fiscal years 1994-1996.

Answer: Provided below is a table identifying the number of GS-12 and above positions in Administrative and Financial Management (AFM) from fiscal year 1993 (the baseline for the streamlining plan) to fiscal year 1996.

**Contributions to Administrative and Financial Management
(AFM) -- Number of GS-12 and above:
FY 1993 Baseline to FY 1996**

	<u>FTE</u> <u>FY-93</u>	<u>FTE</u> <u>FY-94</u>	<u>FTE</u> <u>FY-95</u>	<u>FTE</u> <u>FY-96</u>
SES	4	4	3	3
GS/GM	12	12	8	8
GS/GM-14	31	31	31	30
GS/GM-13	101	101	100	98
GS/GM-12	<u>152</u>	<u>152</u>	<u>149</u>	<u>145</u>
TOTAL, AFM	300	300	291	284

TECH TRANSFER/CRADA'S

Question: Please describe ARS's Technology Transfer Program.

Answer: ARS's Technology Transfer Program is centrally coordinated by the Office of Technology Transfer (OTT), the Agency's Office of Research and Technology Applications (ORTA). Technology transfer starts, however, with the ARS scientist. We rely heavily on individual scientists as technology transfer agents. They are in the best position to know and understand the advantages of the technology they work with and its role in solving agricultural problems, the type of companies most interested in its commercial development, and the right scientific personnel to contact at the companies. OTT assists and coordinates these efforts by providing support from an intellectual property law and business perspective. The office has six patent advisors, all registered patent agents or patent attorneys, located in Beltsville, Maryland, Peoria, Illinois, and Albany, California, to prepare and prosecute patent applications in close collaboration with the inventors. A significant part of their responsibilities includes an outreach effort to educate ARS scientists about the patenting process and its value in the overall ARS Technology Transfer Program.

We also have placed five Technology Transfer Coordinators in research centers across the country: in Philadelphia, Pennsylvania; Beltsville, Maryland; Athens, Georgia; Ames, Iowa; and Albany, California. The Coordinators work with scientists to identify potential cooperative research partners and potential licensees of existing inventions. These individuals also work closely with our central Technology Transfer Officer and Licensing Specialist to negotiate Cooperative Research and Development Agreements (CRADA's) and patent licenses in a thorough and timely manner. Because our technology transfer personnel work closely with both the scientists and the companies, and because the Agency strongly supports the Technology Transfer Program, CRADA's can be negotiated and implemented quickly, with an average turnaround time from beginning negotiations to execution of the agreement of only 4-6 weeks. A rapid decision is an important feature of our program that addresses a critical business need of the private sector.

Decisions regarding whether a particular invention should be patented for licensing are made by OTT with critical input from a committee consisting of experienced ARS scientists, Technology Transfer Coordinators, and the Patent Advisors. Criteria for seeking patent protection include whether: (1) there is current commercial interest in the invention or a high probability of commercialization in the future; (2) the magnitude of the market relative to the costs of commercialization are large enough to warrant a patent; and (3) the patent likely would play a significant role in transferring the technology to the user beyond what could be achieved through publication. Patenting is not always the best way to transfer Federal technology - often rapid publication or other dissemination of research results is the most effective way. Other times, the patent program and cooperative research with industry is the best way when developmental research costs are high.

In addition, to relying on the scientist/inventor to identify and develop industry contacts, OTT has a proactive outreach and information dissemination program to ensure that our technologies are brought to the attention of the agricultural community and consumers.

Question: Specify the resources involved.

Answer: Funds for the operation of the Technology Transfer Program come from two sources. OTT is allocated a base budget of \$1,814,300 from Agency funds. Also, license revenue is used to provide incentives to inventors and other scientists and to defray the costs of patenting and licensing ARS technologies, and to support some of the OTT staff, notably the Licensing Specialist and several of the Technology Transfer Coordinators and Patent Advisors, and their support staff.

Question: Would you list the number of Cooperative Research and Development Agreements (CRADA's) currently underway in ARS?

Answer: ARS has 234 CRADA's underway as of April 10, 1995. Since the passage of the Federal Technology Transfer Act, ARS has participated in 477 CRADA's.

Question: Please describe the kinds of companies involved and types of activities engaged.

Answer: The types of non-Federal cooperators involved in these agreements cover the entire range of components of the American agricultural enterprise, covering a wide range of activities in the Agency, from basic molecular biology and chemistry to engineering applications. Sometimes cooperation involves universities, other Federal agencies, or trade associations in three or more party CRADA's. For example, ARS, the Environmental Protection Agency, and more than 30 chemical companies comprising the Spray Drift Task Force are working together to discover ways to predict and mitigate pesticide drift.

A wide variety of companies partner with ARS, including those whose primary focus is on: food processing, chemical manufacturing, veterinary diagnostic and treatment, control systems, sensor technology, seed and fertilizer development and distribution, biological pest control technologies, farm research, leather manufacturing, instrumentation, beer production, pharmaceuticals, pet food, glue and adhesives, software development, machinery and equipment manufacturing, and engineering firms.

The types of activities involved in currently active CRADA's include, e.g.: plant and animal disease diagnosis, especially using monoclonal antibodies; computerized control of irrigation systems; sensor instrumentation; industrial and agricultural chemical applications; crop and horticultural plant improvements through selective breeding, molecular genetic engineering, and clonal propagation; chemical and biological control of plant and animal pests; sex selection in cattle; modified leather tanning agents; improved food processing techniques to enhance nutritional and sensory qualities; improved plant and animal productivity; control of bacterial contamination of poultry; plant disease pathogenesis; alternative uses of agricultural products, e.g., biodegradable plastics, industrial lubricants from oilseed plants, vegetable oil based biodegradable inks, fat substitutes, starch encapsulation for pest control delivery systems or delayed release formulations, and other value added products; basic molecular biology and gene transduction techniques, integrated pest management; expression of proteins in transgenic plants; protective edible coatings for fruits and vegetables; software development for farm and ecosystem management, predicting microbiological pathogen content of stored foods, and water management; cotton ginning and marketing. These activities cover a wide variety of economically important plants and animals, including cotton, wheat, corn, various fruits and vegetables, soybeans, sugarbeets, potatoes, rice, tomatoes, sorghum, poultry, cattle, swine, and cultured fish.

Question: Would you comment on the importance of the CRADA joint efforts?

Answer: CRADA joint efforts are an important tool for meeting the Agency's mission. They foster cooperative resolution of problems and needs recognized by agricultural producers, manufacturers, and processors. There are numerous positive features of CRADAs, the most important of which are: (1) CRADAs allow the Agency to leverage its mission-oriented research by taking advantage of non-Federal efforts and resources; (2) CRADAs provide the opportunity to more directly transfer Federal technology to industry, thereby speeding the development process to solve agricultural problems; and (3) CRADAs provide Federal scientists with another avenue to understanding the needs of agriculture and their role in solving problems that keep the U.S. competitive in world markets.

Question: Does ARS favor engaging in larger or smaller company participation under these agreements?

Answer: The primary goal of the program is to maximize the transfer of Federal technology to the American consumer. Sometimes this is best accomplished by a smaller company with specialized expertise and a niche market; sometimes it requires the resources, varied expertise, and market penetration of a larger company. Oftentimes it is dictated by the interests, special capabilities, and market presence of the company, large or small. All other things being equal, however, ARS gives special consideration to small businesses interested in participating in a CRADA, as required by the Federal Technology Transfer Act.

Currently, about half of our active CRADAs are with small business firms (as defined by the Small Business Administration). In addition, many of our CRADA partners are located in or directly impact the economy of rural America.

Question: Please describe for the Committee recent successes derived from the CRADA program.

Answer: Several biocontrol products developed through CRADA's with ARS have recently been registered for use by the Environmental Protection Agency, and are expected to be available to the public very soon. A unique strain of an anti-fungal bacteria discovered by ARS scientists was developed by a cooperator, a small biotechnology company, into a commercial product to prevent rot and decay of fruits during storage. This is a timely development, since chemical fungicides currently used for this purpose have come under attack for risks to human health and the environment. This new product is non-toxic to humans, animals, and the environment, yet is effective in controlling molds which cause significant economic damage to stored fruits.

The Beauveria bassiana fungus offers new opportunities to control the silverleaf whitefly that costs U.S. agriculture an estimated billion dollars each year through losses in cotton and vegetable crops. The biological control product developed under this CRADA has recently been approved by the Environmental Protection Agency for a full-scale field test against the whitefly in California, Arizona, and Texas. Other Beauveria strains have also been registered by EPA to control grasshoppers, locusts, and Mormon crickets on rangeland, improved pastures, alfalfa, corn, cotton, potatoes, rapeseed, safflower, small grain crops, soybeans, sugarbeets, and sunflowers.

More than half of all poultry broilers hatched in the U.S. have been vaccinated against salmonella using an automated egg vaccination system developed through CRADA's from an ARS discovery that in ovo vaccination imparts immunity to chicks. This has resulted in substantial cost benefit to the U.S. poultry industry and more than 100 new high quality jobs so far. The small company that developed and marketed the ARS invention plans to export the technology soon to impact the worldwide poultry industry.

Another new biocontrol technique for decreasing salmonella growth in poultry was designed by ARS scientists and turned into a commercially feasible process by a CRADA partner. This method is effective without employing antibiotics or other drugs or chemicals, involving only naturally occurring, non-toxic organisms which out-compete salmonella for nutrients and growing space, and displace the harmful bacteria from the bird's environment.

Another biotechnology company has used the CRADA mechanism to develop and place on the market a beneficial nematode delivery system to biologically control three species of weevils that damage citrus trees, reducing both vigor and yield, and mole crickets, a serious pest of turfgrass. These pests cause serious economic injury to the citrus fruit and turfgrass industries, respectively.

A pepper weevil pheromone kit is now available as a result of a CRADA that employs an ARS biocontrol technology as part of an Integrated Pest Management system for detection and control of pepper weevils, an important pest in the cotton and vegetable growing areas of the United States and Mexico.

A new test developed by ARS will enable catfish farmers to detect and treat a deadly disease in time to save the fish. The test detects Edwardsiella ictaluri in the blood of catfish by identifying the antibodies produced to fight the resulting disease.

When an outbreak of this disease occurs, typically half of the farmer's catfish die, causing substantial financial loss. In addition, the costs of the disease escalate as farmers use expensive antibiotic-dosed feed to try, often unsuccessfully, to prevent the infestation. The test will save farmers money two ways: by telling them when to switch to the more expensive feed and by reducing the number of deaths during an outbreak. It is expected to be available to farmers in 18 months.

A CRADA involving the participation of several universities in addition to a major food company resulted in the contribution to the Oat Genome Project of a molecular marker-based genetic linkage map for the cereal oat. The project is modeled after the Human Genome Project and is projected to have significant impact on the industry.

Through a CRADA, an equipment manufacturer has developed and tested a commercial prototype mechanical harvester for fresh market quality blueberries. Commercial production is expected to begin in 1996. This new piece of equipment will reduce grower costs and improve the quality of fruit for the consumer.

As part of a CRADA with a machinery company, ARS is evaluating several natural biodegradable, water-resistant coatings for starch-based disposable foam cups, plates, and packing. There is strong consumer demand in the U.S. for these types of environmentally friendly "fast-food" dinnerware, which can biodegrade naturally into compost or be used as animal feed. However, since these (potato or corn) starch-based items soften in contact with water, commercialization as consumer products awaits only the development of a reliable water-resistant coating. This CRADA is a next logical step in the transfer of this exciting technology to commercial use as a replacement for petroleum-based plastics.

A non-toxic repellent of fire ants, a major Southern pest, is being patented by ARS, and two CRADA partners are working with our inventors to develop commercial applications for the technology.

A new edible coating was patented by ARS scientists to retard ripening and extend the shelf life of fresh fruits and vegetables. The water-based coating contains natural food ingredients effective to slow ripening. After further practical development under a CRADA, the technology has been licensed by three companies.

Question: Please explain the patent policy under which ARS operates and the pros and cons, if any, to this policy.

Answer: It is ARS policy to use the patent system to promote the utilization of inventions arising from its research, to ensure that sufficient rights in inventions are obtained to meet the needs of the Government, and to bring the invention to practical application. ARS recognizes that patents represent documentation of research accomplishments and considers patents, along with other factors, as evidence of research productivity in evaluating scientist performance. The Federal Technology Transfer Act requires that at least 15% of license income must be paid to the inventors. Like most other Federal agencies, ARS goes beyond this to award inventors a 25% share as an incentive to further technology transfer. The remaining income is used for payment of expenses related to the administration and licensing of inventions, such as patent issue and maintenance fees, and for other activities throughout the Agency that increase the potential for transfer of ARS technologies.

Inventors are required to take prompt action to report inventions made as a direct result of their official duties. ARS files for patent protection on those inventions that have been adequately described, reduced to practice, and evaluated to determine that they appear to have significant commercial potential and that a patent will speed technology transfer and preserve Government property rights.

For inventions developed under a CRADA, it is ARS policy to provide the Cooperator with the first right of refusal to an exclusive license of a patent under the agreement, provided the inventions are promptly reported to ARS and prosecution of the patent is by or coordinated through ARS to ensure adequate protection of the Government's interest.

Question: What has been the trend in numbers of patents in ARS?

Answer: The number of patents issued to ARS has remained relatively stable over the last 15 years, averaging about 50 patents per year. However, ARS has been involved in an active patenting program for many years. Perhaps a better indicator of the impact of recent statutes is the increase in the number of income producing licenses of ARS technologies. Before 1986, very few such licenses were in place. Since then, ARS executes an average of about 20 income producing licenses per year.

Question: How much money has ARS received under the patent program?

Answer: ARS has received a total of \$6,827,000 over 9 years in revenue from licenses of ARS technologies. The table below shows license revenue by fiscal year.

Fiscal Year	License Revenue (dollars in thousands)
1987	107
1988	116
1989	411
1990	543
1991	834
1992	1,044
1993	1,557
1994	1,483
<u>1995(to April)</u>	<u>732</u>
Total	6,827

SMALL BUSINESS INNOVATION ACT TRANSFERS

Question: Identify the funds transferred by ARS, CSREES, NASS and ERS under the Small Business Innovation Act for fiscal years 1990 through 1995.

Answer: The funds transferred by ARS, CSREES, NASS and ERS under the Small Business Innovation Act for fiscal years 1990 through 1995, will be provided for the record.

(The information is as follows:)

Agency	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	Total
	(Dollars in Thousands)						
Cooperative State Research Education & Extension Serv.	\$3,821	\$4,536	\$5,025	\$6,046	\$6,198	\$8,068	\$33,694
Agricultural Research Service	175	229	398	408	429	672	2,311
National Agricultural Statistics Service	2	4	2	3	2	3	16
Economic Research Service	<u>7</u>	<u>16</u>	<u>21</u>	<u>15</u>	<u>17</u>	<u>43</u>	<u>112</u>
Total	4,005	4,785	5,446	6,472	6,646	8,786	36,140

EQUIPMENT/OTHER SERVICES EXPENDITURES

Question: Identify the major kinds of expenditures in FY 1994 under the Agency's "Equipment" and "Other Services" classification.

Answer: "Major Equipment" and "Other Services" expenditures are as follows:

Equipment 1994

Laboratory	\$18,417,883
ADP Equipment--Mainframe	4,732,295
ADP Personal Computers	1,570,384
Agricultural Equipment Machinery	3,941,691
Durable Personal Property--Capitalized and Noncapitalized: transportation, furniture and fixtures, books for permanent collections, tools and implements, machinery, instru- ments and apparatus, other ADP	7,927,408
All Other Equipment Expenditures	<u>7,860,066</u>
Total Equipment	44,449,727

Other Services 1994

NFC Processing/Greenbook	3,026,900
Contractual Services-Other	25,962,777
Specific Cooperative Agreements with State Institutions	23,735,547
General Cooperative Agreements	8,872,592
OMB Circular, A-76 Contractual Services	2,531,598
Training/Tuition Fees, etc.	1,872,134
Other Miscellaneous Service	10,462,311
Insurance Claims and Indemnities, Indemnities, Regular Indemnity, Litigation fees and Awards, Special Payments, Partial payment from Impress Fund, Spot Cash, Partial Repayment	1,048,539
Other Non-Travel Expenses Reimbursed on	841,362
NFC Agency Specific (Reimb.) cost	578,320
Fees	382,178
ADP Data Processing Services	313,885
All Other Expenditures	<u>7,963,894</u>
Total Other Services	87,592,037

Question: As noted in the Explanatory Notes, ARS receives funds for services from other Federal agencies. Please identify for FY 1994 the significant services performed for each of these agencies and the amounts received.

Answer: The funds ARS received from other Federal agencies in FY 1994 are as follows:

<u>Other Federal Funds</u>	<u>Amount</u>
Department of the Army.....	\$1,469,336
Development of improved grasses and forbs for stabilization of military training areas; and phytoestrogens in the food supply.	
Department of Commerce.....	97,251
Accurate assessment of dietary intake.	
Department of Defense.....	204,453
Low maintenance plant materials for dryland sites; reduce toxic exposure from aerial pesticide applications for mosquito control; and evaluate water quality/ecology in December project.	
Department of Energy.....	927,008
Control of sucrose biosynthesis in plants; assess- ment of crop responses to carbon dioxide; and selecting in situ containment barriers for landfills.	
Department of Health and Human Services.....	2,136,672
Fate of levamisole in dairy cattle; coca yield survey in Peru; nutrients associated with cardiovascular health; and flavonoids in the food supply.	

Department of the Interior.....	444,531
Aquatic and ditchbank weed control; biological control of saltcedar; control of weeds infesting Indian trust lands; and application of modeling technology in rangeland resource management.	
Department of Justice.....	115,900
Rental of space.	
Department of State.....	209,074
Support of research projects with FSU countries; cost effective means of controlling perennial plants.	
Environmental Protection Agency.....	2,627,602
Development of pesticide emissions model; assessment of environmental stresses on the health of agroecosystems; develop model for the wind erosion system; and space rental and other miscellaneous services.	
National Aeronautics and Space Administration.....	135,162
Land surface flux determination study using infrared; and multispectral video remote sensing.	
National Science Foundation.....	159,000
Partial support for PEGI conference.	
Miscellaneous Other Federal Funds.....	<u>406,495</u>
Services include managing soil and water contamination with metals; rhizosphere in relation to iron nutrition of plants; reducing evaporation from cultivated soils; space rental; and other miscellaneous services.	
TOTAL, Other Federal Agencies.....	\$8,932,484

RESEARCH

Question: ARS devotes about \$20 million to citrus research. What is the major focus of this research and where is it conducted?

Answer: In FY 1995, ARS research on citrus and other subtropical fruits is funded at \$19,395,100. A description of research by location follows:

Albany, CA (PGEC)--Development of plants resistant to ethylene-induced fruit ripening.

Albany, CA (WRRRC)--Development of sensors and assays to detect important molecules and residues in foods; citrus quality factors; new uses for citrus byproducts; processing of insect diets for mass rearing of biocontrol agents.

Beltsville, MD--Nondestructive testing methods for fruit condition; resistance to viral and bacterial diseases; systematics of insect pests of citrus.

Davis, CA--Germplasm acquisition and maintenance.

Fresno, CA--Control of postharvest diseases and insects; alternatives to methyl bromide fumigation for control of quarantined insects; integrated management of postharvest pests.

Gainesville, FL--New methods for detection and control of citrus insect pests, modification of insect behavior; new crop management strategies to minimize losses.

Hilo, HI--Fruit fly biology and control technologies; sterile fruit fly production; postharvest quarantine treatments; germplasm acquisition and maintenance.

Mayaguez, PR--Germplasm acquisition and maintenance; management and cultural practices of tropical crops.

Miami, FL--Postharvest storage techniques that improve marketability; introduction, preservation, and enhancement of germplasm; systems approach and quarantine treatments for fruit flies.

Orlando, FL--Citrus genetics and breeding; biocontrol of citrus insect pests; diseases and nematodes affecting citrus; development of new quarantine treatments of fruit; reduce chilling injury of fruits.

Raleigh, NC--Basic molecular aspects of fruit sugar accumulation.

Riverside, CA--Maintain a pathogen-free clonal germplasm collection.

Tifton, GA--Pesticide residue analysis.

Weslaco, TX--Biologically-based strategies to regulate fruit quality and enhance shelf life; quarantine treatments to replace methyl bromide fumigation; integrated management of fruit flies.

Winter Haven, FL--Prolonging shelf life of fruit; quality enhancement of fruit and juices; value-added products from citrus processing waste.

Wyndmoor, PA--Development of industrial polymers incorporating pectin.

Headquarters--Funds distributed to various locations for operation of germplasm repositories; for integrated pest management projects; and for registration of minor use pesticides.

Question: ARS carries out research to control fruit flies. Identify the major fruit fly pests and the research efforts involved. How much funding is allocated to these pests?

Answer: The ARS fruit fly program encompasses a wide range of approaches relating to eradication, detection and control, and is conducted at ARS laboratories in the following eight locations: Albany, CA; Fresno, CA; Gainesville, FL; Miami, FL; Orlando, FL; Honolulu, FL; Beltsville, MD; and Weslaco, TX. Major emphasis is placed on the following six fruit fly species: Mediterranean, Oriental, Caribbean, Mexican, Melon, and Malaysian.

Because fruit fly populations often exceed population levels practical for sterile male release eradication programs, emphasis has been given to developing environmentally compatible methods of reducing fruit fly populations consistent with sterile male requirements. A critical need is the development of an environmentally benign toxicant to incorporate into bait sprays to replace malathion. Ten acre tests with the photoactivated xanthene dye indicate great promise as such an environmentally and safe toxicant. This is extremely important because malathion use has been greatly restricted and its continued availability as a component for eradication efforts is doubtful. Large scale tests will commence in Texas, Hawaii and Guatemala upon receipt of the requested Environmental Use Permit from EPA. Also, research to develop fruit fly parasites, underway in Florida and Hawaii, offers possibilities to reduce fruit fly population levels in an environmentally acceptable manner.

Other important research includes: 1) development of more sensitive traps and baits for early detection of fruit fly infestations and tracking of eradication programs; 2) improved methodology for economical rearing of fruit flies and parasites used in sterile releases and inundative releases; 3) development of more competitive fruit fly strains for use in sterile and male release programs.

The total funding budgeted for fruit fly research in FY 1995 is \$10,158,500.

Question: What research does ARS do in the area of animal well-being? Please indicate location and funding levels.

Answer: The major portion of the Agricultural Research Service's animal well-being research effort is conducted at West Lafayette, Indiana, (\$1,003,500) and focuses on the identification of internal states of animal cognition/ perception and the development of scientifically credible indicators of well-being for farm livestock. Additional research is being conducted at Beltsville, Maryland, (\$348,100) relating stress to well-being in lactating dairy cows and at Clay Center, Nebraska, (\$230,800) determining the influence of the modification of management systems on stress reduction in swine. A new program on swine behavior/ well-being is being initiated at Ames, Iowa, (\$192,600).

Question: Does ARS carry out biotechnology risk assessment activities? Please explain.

Answer: Yes, the 1990 Farm Bill authorized a grants program for environmental risk assessment research concerning the introduction of genetically-engineered organisms into the environment. This provision required a one percent set-aside from outlays of the Department for research in biotechnology as defined and determined by the Secretary. The program became fully operational in FY 1992 and is administered by ARS and CSREES.

Funding for the program totalled \$1.4 million in FY1992, \$1.7 million in FY1993, \$1.7 million in FY1994, and \$1.7 million in FY1995, and is awarded competitively. To date, a total of 29 biotechnology risk assessment projects have been awarded competitive funding from the ARS-CSREES sponsored program, covering a number of high priority biotechnology risk assessment concerns of the regulatory agencies. In addition to helping to administer the program, ARS also participates in the research. ARS has been awarded competitive funding for three biotechnology risk assessment projects that have been submitted to the program since 1992. These include studies on the stability of disabled viroid sequences in transgenic plants; the risk of transgenic alfalfa dissemination during seed production; and the crossability relationships between transgenic potato varieties and related wild species.

Question: What progress is being made to combat the spread of sweetpotato whitefly?

Answer: During the past year we have made significant progress against the sweetpotato whitefly (SPW). We have developed a microbial biocontrol agent, *Beauveria bassiana*, as the first promising candidate for commercialization. This biocontrol fungus could start providing relief in the fall of 1995 to growers of melons, cucumbers, cole crops, tomatoes, and other vegetables in the Southwest and Florida. In 1994 spring and fall field trials, the fungus killed up to 90 percent of whiteflies in small field plots of cantaloupe, cucumber and tomato. On the basis of our accumulated knowledge about crop hosts and pest management, several community-wide cotton/sweetpotato whitefly management programs have been developed using information on monitoring and dispersal. We have identified several insecticides or insecticide combinations that are effective for SPW control on cotton, squash, melon, broccoli, tomatoes, and lettuce. A number of biorational materials that include oils, soaps, and plant products have been shown effective for some crops, and may be useful in insecticide rotation systems to avoid resistance. We have developed pesticide application methods to obtain better coverage with ground and aerial application equipment, and reduced spray drift. We also developed a highly effective and efficient yellow-sticky card system for pesticide resistance monitoring. We have developed various methods for combating resistance development, such as chemical rotation systems. Our research suggests that crop production inputs have a measurable influence on SPW population dynamics. For example, efficient water use to prevent stress in cotton can be an effective IPM component. We have identified several crop types (peanut, melon, cotton, broccoli, collard and tomatoes) that have resistance to the SPW, as well as resistance to tomato mottle and other diseases. USDA is working cooperatively with grower organizations and implementing areawide SPW management projects, as well as augmentative releases of predators. Through the interagency activity, an excellent pesticides resistance management program was developed in California and a resistance management working group has been established to expand the system on a national basis. Also, SPW research and management committees have been organized in California, Arizona, Texas and Florida, with participation of extension and education agencies that provide updated information through computer information bulletin boards, visual systems, and periodic meetings with growers and others interested in SPW management.

Question: What are the resources allocated to this pest in fiscal years 1994-1996?

Answer: Funding allocated to sweetpotato whitefly in fiscal years 1994-1996 is as follows:

<u>Location</u>	<u>FY 1994</u> <u>Funds</u>	<u>FY 1995</u> <u>Funds</u>	<u>FY 1996</u> <u>Funds</u>
Phoenix, AZ	\$1,114,800	\$1,500,000	\$1,500,000
Albany, CA	57,600	--	--
Salinas, CA	37,300	59,200	59,200
Newark, DE	34,800	36,700	36,700
Orlando, FL	257,100	339,300	339,300
Tifton, GA	75,100	75,000	75,000
Beltsville, MD	362,200	361,900	361,900
Stoneville, MS	--	138,000	138,000
Ithaca, NY	75,100	74,800	69,800
Fargo, ND	209,000	187,900	187,900
Charleston, SC	394,000	414,800	414,800
Coll.Stat., TX	310,600	222,800	222,800
Weslaco, TX	869,200	557,500	557,500
Montpellier, France	109,200	109,100	109,100
Totals:	3,906,000	4,077,000	4,072,000

Question: What aquaculture problems and needs does your research address? Where is this research carried out?

Answer: The aquaculture research program in ARS addresses problems in catfish production on disease control and diagnosis; developing control strategies to limit the impact of environment on off-flavors of product; developing improved strains for disease resistance; technology to maintain strain identity; food safety; water use management quality control; and fish health management. This work is carried out at the following locations:

Auburn, AL - Immunity, diagnosis, and control of diseases and parasites of cultured fish.

Beltsville, MD - Aquaculture Information Center

New Orleans, LA - Improving flavor quality of farm-raised catfish.

Pine Bluff, AR - Aquaculture production and processing technology.

Stoneville, MS - Improving production efficiency including breeding, genetics, and endocrinology of catfish.

Kearneysville, WV - Water quality control.

College Station, TX - Food safety of catfish.

Stuttgart, AR - Fish health management research.

Hilo, HI - Tropical aquaculture, culture, and feed technology.

Question: How much money do you allocate to the area of global climate change? What are the problems which you are addressing? What are the most significant findings?

Answer: The ARS allocated \$24,427,200 to global change research in FY 1995. Of this amount \$13,139,200 is focused on finding alternatives to methyl bromide; \$5,673,200 is used in relation to soil fumigation; and \$7,466,000 in relation to treating post-harvest commodities. The \$11,288,000 balance of the total global climate change program is directed toward: (1) understanding how agricultural production practices might contribute to climate change; and (2) understanding how climate change might affect agriculture, and developing adaptive strategies.

Some significant findings have been obtained from the ARS Global Change program. Research on crop response to elevated carbon dioxide shows that, in general, certain temperature climate plants (wheat, rice, potato, soybean, sugar beet, alfalfa, cotton, tree and vine crops, most vegetable crops, and cool season grasses) respond more favorably with increased growth than do tropical plants of the grass family plants [maize (corn), sorghum, millet, sugar cane, and warm season grasses]. Thus in competitive situations (rangelands for example) increased carbon dioxide favors shrub invasion over tropical grasses. However, the response to increased carbon dioxide is a function of species, temperature and site conditions.

Crop models developed to simulate the effect of increases in carbon dioxide on plant physiology and response are aiding in this research. Data show that increased carbon dioxide levels will increase the emissions of methane in rice fields. Changes in land

use and management affect plant response, soil carbon storage, and gaseous exchanges at the soil surface; and can lead to management changes that will minimize the adverse effects and enhance the positive effects of climate change on productivity. Long term changes (reductions) in soil carbon as a result of farming operations far exceed the likely response to climate change, thus management changes to increase carbon sequestration may offset the climate change effects on soil carbon levels.

The Snowmelt Runoff Model (SRM) has been used to show that a warming of 4 degrees C will cause a shift in the relative winter/summer runoff percentages from 15%/85% to 30%/70% in a number of watersheds in Western North America. Two ARS models, EPIC and SWAT, have been used for simulating the effects of elevated carbon dioxide on plant growth, crop yield, and evapotranspiration in the midwest U.S.

Question: What are the most significant issues you are addressing in your animal health research programs?

Answer: The most significant issues in our animal health research programs currently being addressed are divided into three categories: (1) emerging diseases within the United States; (2) chronic animal diseases within the United States; and (3) foreign animal diseases that pose a threat to the U.S. livestock industry. Currently, the most important emerging diseases include bovine tuberculosis, porcine reproductive and respiratory syndrome, and the bacteria *Escherichia coli* 0157:H7 and *Salmonella enteritidis*. Chronic animal diseases in the United States include brucellosis, cryptosporidiosis, anaplasmosis, and pseudorabies. Important foreign animal diseases of concern are avian influenza, foot-and-mouth disease, African swine fever, and piroplosmosis.

Question: What progress have you made in solving these problems?

Answer: With respect to emergency diseases, Bovine tuberculosis is a bacterial disease that can infect humans and is reemerging at the Texas-Mexico border. Research progress concerning bovine tuberculosis has been made in the development and evaluation of improved diagnostic tests for eradication. The end result of this work will be accurate diagnosis of tuberculosis and determination of the number and locations of infected animals.

Porcine reproductive and respiratory syndrome is a viral disease that causes reproductive and growth losses in pigs. Progress toward solving problems associated with infection by this virus include demonstrating protective immune responses to infection and understanding transmission. The former finding indicates vaccination is a potential control method.

The bacteria *Escherichia coli* 0157:H7 (cattle) and *Salmonella enteritidis* (poultry) are human pathogens and food safety concerns. Use of molecular biological approaches have led to the development of reagents (monoclonal antibodies) that are currently being evaluated for diagnosis of *E. coli* 0157:H7. The relationship of *Salmonella enteritidis* and poultry is being defined and the information utilized to improve detection of this bacterium and decrease its level in pre-harvest poultry.

With respect to chronic diseases, Brucellosis is characterized by reproductive losses in cattle and is a human pathogen. A new vaccine (RB51) has demonstrated efficacy in protecting cattle against reproductive losses. Also, a rapid diagnostic assay based on DNA-detection technology has been developed for detection of this bacterium.

Cryptosporidiosis is a major cause of diarrhea in calves and can cause diarrhea in humans. Progress on the problems associated with infection by *Cryptosporidium parvum* include: (1) identification of temperatures and times that render this parasite inactive in water; (2) the acquisition of knowledge concerning the development of a protective immune response; and (3) progress toward development of accurate methods of detection.

Anaplasmosis is characterized by death and reproductive losses in cattle and is an export restriction for United States cattle to Canada. An accurate and sensitive diagnostic test has been developed for detection of cattle persistently infected with *Anaplasma marginale*.

Pseudorabies is a viral disease responsible for severe reproductive losses in swine. The location in pigs where pseudorabies virus persists has been defined and a sensitive method for diagnosing persistently infected pigs developed. This information will aid the current pseudorabies eradication campaign.

With respect to foreign diseases, there is currently an avian influenza outbreak in Mexico. The previous outbreak in the United States (1983-84) cost \$63 million. The avian influenza virus causing the current outbreak in Mexico has been identified and the genetic change responsible for the increased virulence defined. Diagnostic aids to track the outbreak and vaccines against the current virulent virus are being developed.

Foot-and-mouth disease is economically the most important foreign animal disease threat to United States livestock. Tools necessary to assure that the United States remains free of foot-and-mouth disease and to respond to an outbreak are in development. Toward these goals, genetically defective, non-infectious whole virus vaccines are being tested and diagnostic reagents that will detect all virus variants developed.

African swine fever virus research has focused on understanding the protective immune response and developing reagents to prevent introduction of the virus into the United States or to control an outbreak. Viral genes responsible for virulence of African swine fever virus are being defined and disease prevention strategies formulated from this information.

Accurate diagnostic methodology for piroplasmosis in horses is crucial for the screening of horses entering the Olympic games in Atlanta, Georgia, in 1996. An accurate assay for detection of horses infected with *Babesia equi* (a cause of piroplasmosis) has been developed and is being validated through cooperation with the Animal and Plant Health Inspection Service.

Question: Please explain how these issues are coordinated with APHIS.

Answer: Cooperation concerning animal health problems are coordinated by APHIS and ARS at multiple points, including policy and program planning, cooperative research and development, and technology transfer to operational control programs. At the headquarters level, formal liaison arrangements exist between the two agencies for policy and program planning. At the field level, ARS and APHIS technical personnel work closely together and are co-located at several places, including the animal disease laboratories at Plum Island, New York and Ames, Iowa.

Question: ARS spends about \$136 million in pest control research. What are the major programs involved in this area?

Answer: The Agricultural Research Service (ARS) firmly believes that pest management systems employing pest-specific technologies can lead to substantial reductions in agricultural production losses and in the use of pesticides. These systems in the long run will result in large savings in agricultural production costs and environmental quality. This is reflected in the fact that compared to 20 years ago, ARS has changed from mainly evaluating new pesticides to a program today in which about 80 percent of our pest management research program is directed towards developing biologically-based alternatives to conventional pesticides. The remaining 20 percent of the program deals with technologies and systems to reduce chemical pesticides and improve upon the timing, safety, and efficiency of their use in concert with environmental and economic goals. ARS does not devote any resources to the development of new chemical pesticides, but does evaluate new ones developed by industry and other cooperators. More specifically, our efforts on chemical means is largely directed at improving pesticide use patterns, including development of safer, more effective ways to use chemical pesticides in pest management schemes by timing, formulations, and modes of application; improved detection and measurements of pesticides and metabolites; and ways to eliminate or minimize chemical residues.

ARS research on non-chemical means of pest management includes fundamental studies of the taxonomy, biology, ecology, physiology, pathology, metabolism, and nutrition of pests and host plants and animals; as well as development of non-chemical means through natural enemies such as predators, parasites, and pathogens of pests, pest resistance, sterile insect technology, naturally-derived attractants and repellents, and cultural and physical control practices.

Question: How much is devoted to non-chemical means of pest control and biocontrol?

Answer: Of the \$136 million ARS spends on pest control research, \$109,549,000 is devoted to non-chemical means of pest control with \$49,886,000 of this amount allocated exclusively to biocontrol. The ARS programs related to integrated pest management include work on biocontrol and other work on IPM systems and technologies that are not limited to biocontrol agents. The ARS budget proposal for IPM and related activities is \$67.9 million, an increase of \$3.5 million from the 1995 level.

Question: Describe for the Committee the most serious threats to the honey bee industry which your agency is researching.

Answer: The most serious threats to the honey bee industry being addressed by ARS include the two parasite mites, tracheal and varroa, since they continue to be the most critical biological problems for the U.S. beekeeping industry. Africanized honey bees are currently a problem for beekeepers and the public in the arid Southwest. Finally, the wax moth and chalkbrood disease are additional concerns being researched by ARS scientists.

Question: Where does ARS carry out its honey bee research? Specify the research and resources for each laboratory.

Answer: The following table indicates the location, program emphasis, and FY 1995 funding for honey bee research:

<u>LOCATION</u>	<u>PROGRAM EMPHASIS</u>	<u>FY 1995 FUNDING</u>
Tucson, AZ	Optimization of crop yields through improved pollinator systems	\$1,087,900
Baton Rouge, LA	Genetics, health, and physiology of honey bees	1,134,100
Beltsville, MD	Biology and control of honey bee diseases and parasites	1,122,800
Weslaco, TX	Parasitic mites of honey bees and management of Africanized honey bees	<u>845,300</u>
	TOTAL	\$4,190,100

Question: What progress has been made in fulfilling the original plans for the establishment of the National Warmwater Aquaculture Research Center, including facilities and scientific support? What additional funding is required to fully implement this plan for the Center? Please indicate the additional funding required to provide full staffing and operational support for the Center and to complete construction of the Center's facilities.

Answer: Steady progress is being made on both the research program and the facilities in fulfilling the original plan of the National Warmwater Aquaculture Research Center. Construction of an aquaria building and 96 acres of ponds have been completed. One scientist was hired and another is being recruited with the current program appropriation of \$832,400 annually. Appropriations totaling \$6,694,000 have been allocated for construction of the National Warmwater Aquaculture Research Center. An additional \$1.9 million is needed to complete construction of the laboratory-office building. Based upon current estimates, the Center's full staffing and operational support will require an additional \$2.5 million per year.

Question: By location, identify your water quality research programs and resources for fiscal years 1994, 1995, and 1996.

Answer: The funds devoted to the water quality research program of ARS are listed in the following table:

<u>Location</u>	<u>FY 1994</u> <u>Funds</u>	<u>FY 1995</u> <u>Funds</u>	<u>FY 1996</u> <u>Funds</u>
Auburn, Alabama	\$ 81,800	\$ 81,700	\$ 81,700
Buenos Aires, Argentina	31,200	41,200	41,200
Phoenix, Arizona	1,216,500	948,800	948,800
Tucson, Arizona	815,200	545,700	545,700
Stuttgart, Arkansas	12,100	22,100	22,100
Albany, California	124,000	124,700	--
Fresno, California	1,184,100	1,183,400	1,183,400
Riverside, California	2,145,700	2,197,100	2,197,100
Fort Collins, Colorado	2,331,900	2,219,300	2,219,300
Akron, Colorado	415,200	414,900	414,900
Newark, Delaware	169,900	183,700	183,700
Gainesville, Florida	51,000	50,900	50,900
Orlando, Florida	781,400	839,000	839,000
Fort Lauderdale, Florida	72,500	56,900	56,900
Byron, Georgia	315,200	315,000	315,000
Tifton, Georgia	3,210,200	3,091,400	3,091,400
Boise, Idaho	175,600	175,400	175,400
Kimberly, Idaho	1,447,000	1,620,200	1,620,200
Peoria, Illinois	465,000	464,600	464,600
Urbana, Illinois	773,800	773,300	773,300
West Lafayette, Indiana	956,400	955,600	955,600
Ames/Ankeny, Iowa	5,641,200	5,190,700	5,190,700
Manhattan, Kansas	201,500	201,300	201,300
Baton Rouge, Louisiana	653,200	652,700	652,700
Houma, Louisiana	101,200	101,100	--
New Orleans, Louisiana	419,200	418,700	--
Beltsville, Maryland	6,885,200	7,639,700	7,418,200
Frederick, Maryland	1,102,500	1,007,800	1,007,800
Morris, Minnesota	1,123,900	1,123,200	1,123,200
St. Paul, Minnesota	1,230,400	1,230,100	1,230,100
Miss. State, Mississippi	151,900	151,800	151,800
Oxford, Mississippi	3,052,700	2,644,800	2,644,800
Stoneville, Mississippi	1,910,600	2,153,200	2,153,200
Columbia, Missouri	1,680,900	1,680,000	1,680,000
Sidney, Montana	25,700	25,700	--
Lincoln, Nebraska	1,681,400	1,531,500	1,531,500
Chatsworth, New Jersey	57,100	57,100	--
Ithaca, New York	54,700	54,500	54,500
Fargo, North Dakota	476,200	439,800	439,800
Mandan, North Dakota	407,900	623,800	623,800
Columbus, Ohio	657,800	657,700	657,700
Coshocton, Ohio	756,300	705,800	705,800
Wooster, Ohio	436,300	435,900	435,900
Durant, Oklahoma	1,855,600	1,853,200	1,853,200
El Reno, Oklahoma	99,900	99,700	--
Stillwater, Oklahoma	541,400	540,700	540,700
University Park, Pennsylvania	360,500	360,200	360,200
Wyndmoor, Pennsylvania	218,200	218,100	--
Charleston, South Carolina	157,600	150,800	150,800
Florence, South Carolina	1,354,200	1,353,300	1,353,300
Brookings, South Dakota	423,400	284,300	284,300
Bushland, Texas	94,400	94,400	94,400
College Station, Texas	855,600	1,101,100	1,101,100
Temple, Texas	918,000	916,700	916,700
Weslaco, Texas	100,000	125,000	125,000
Suffolk, Virginia	74,100	--	--
Prosser, Washington	117,500	117,600	117,600
Pullman, Washington	101,300	101,300	101,300
Yakima, Washington	381,000	380,700	380,700
Total	\$53,136,200	\$52,728,900	\$51,462,300

Question: Please describe for the Committee your boll weevil research effort and future needs for this program.

Answer: ARS boll weevil research is directed toward supporting the ongoing boll weevil eradication program which has been very successful in the cotton producing areas of the southeast and the far west. The National Cotton Council estimates that the industry obtains about \$12 in benefits for each \$1 spent on the program. The eradication program results in a 40-90 percent reduction in pesticide usage in areas where the pest has been eliminated. The eradication program is just commencing or is slated to commence in Mississippi, Louisiana, Arkansas, Tennessee, and Texas. Past and current ARS support for this effort has produced: the boll weevil attractant, grandlure, which is used to survey boll weevil populations; a control technology called BWACT (or the boll weevil bait stick), which in low density populations of boll weevils effectively attracts them to a controlled and stationary dose of insecticide; a demonstration of the effectiveness of the insect growth regulator, Dimilin, for control of boll weevil populations in late season; a Geographical Information System used by the Mississippi Boll Weevil Management Corporation; and a fundamental understanding of the basic biology, behavior, and population dynamics of the boll weevil, which is useful to the development of an effective biological control program.

In the future, ARS plans to address the continuing needs of the eradication effort by directing its research toward ways of reducing the amounts of malathion used in the program, either through reduction of dosage or number of applications throughout the season; a determination of the timing of diapause induction and termination of diapause in boll weevil populations in the mid-south for use in timing of control measures; the use of bait sticks and/or augmentative parasite releases in environmentally-sensitive areas; a determination of the synergism of Dimilin and malathion in late season control procedures; an evaluation of the use of fungal parasites for boll weevil control; and investigations of early and late season movement of boll weevils and the response of overwintering boll weevils to baits in the winter and early spring. The expansion of the eradication effort effectively triples the size of the program and takes it into areas that have not received attention in the past.

Question: What resources are allocated to this program?

Answer: The resources provided for boll weevil research in FY 1995 are \$3,195,300.

Question: Please describe for the Committee the research carried out in your animal health programs for John's disease, Bluetongue, and Bovine Spongiform Encephalopathy.

Answer: Research concerning John's disease is carried out at the National Animal Disease Center, Ames, Iowa, and is focused on developing a diagnostic assay to identify cattle and sheep that are infected but not yet showing disease. Since John's disease is a chronic, persistent infection, research is also focused on understanding immune responses to the bacterium with the intention of deriving intervention strategies.

Bluetongue research is centered at the Arthropod-borne Animal Disease Research Laboratory, Laramie, Wyoming, and is focused on defining vectors and vector factors that are involved in transmission of the causative virus to cattle and sheep. The intended outcome of this work is characterizing disease distribution and recommendations for control. An equally important aspect of this research is defining the virus-host interface in terms of host-immunity and accurate diagnosis.

Bovine spongiform encephalopathy (BSE) research is carried out at Ames, Iowa, and the Animal Disease Research Unit, Pullman, Washington. The precise cause of BSE and related spongiform encephalopathies (scrapie of sheep, chronic wasting disease of mule deer, and Creutzfeldt-Jakob disease of humans) has yet to be defined. A protein, referred to as PrP, has been associated with disease, and a focus of current research is defining the relationship of PrP to the transmissible agent. Another focus of current research is the development of a diagnostic assay for animals that are infected but not yet showing disease. This work

also includes understanding the genetic basis of disease resistance and defining mode(s) of transmission and the animal sources of infectious material.

Question: What resources are allocated to these diseases?

Answer: The following list provides resources allocated to these diseases based on location.

Johne's disease (NADC, Ames, Iowa)	\$ 510,300
Bluetongue (ABADRL, Laramie, Wyoming)	2,171,100
Bovine spongiform encephalopathy	1,787,600
(NADC, Ames, Iowa - \$987,600)	
(ADRU, Pullman, Washington - \$800,000)	

Question: Please inform the Committee of the Africanized Honey Bee threat and current research and control activities carried out on this pest.

Answer: The Africanized honey bees continue to expand their range, and in 1994 they were detected for the first time in Puerto Rico, Virgin Islands, and Blythe, California. However, since 1992 their spread has slowed significantly, perhaps due to climate and/or Varroa mite infestation.

ARS supports Department and State action and regulatory programs and the concerns of the beekeeping industry through Africanized honey bee research at four major laboratories. The Bee Research Laboratory at Beltsville, Maryland, develops new techniques for Africanized honey bee identification, genetically characterizes honey bee populations in the New World, and provides authoritative identification services and training for regulatory agencies. At the Honey Bee Breeding, Genetics & Physiology Research Laboratory in Baton Rouge, Louisiana, research emphasis is given to the genetic process of Africanization and to the development of barrier and control technologies. Research at the Honey Bee Research Laboratory, Weslaco, Texas, focuses on the management of European and Africanized honey bees, monitoring changes in feral honey bee populations, the impact of Africanization on pollination of fruit and vegetable crops, and the development of methods for personal protection from Africanized honey bee stinging incidents. At the Carl Hayden Bee Research Center, Tucson, Arizona, scientists are developing new bait hive technologies and monitoring the process of Africanization in arid environments. They have also developed techniques for rescue workers to intervene in major stinging incidents, and are currently transferring this technology.

Question: I have received reports on the spread of an exotic weed called Tropical Soda Apple in my State of Mississippi. What is the agricultural and economic threat of Tropical Soda Apple? Please explain your plans to deal with this. What resources are currently being expended?

Answer: Tropical soda apple (TSA), *Solanum viarum*, is an exotic weed introduced into southern Florida from Brazil. It is now well established over half of the Florida peninsula, and is rapidly spreading from southern Florida to other states of the South, with outbreaks confirmed in Georgia and Mississippi. ARS work shows that TSA is adapted to conditions as far west as central Texas. It has been a serious pest primarily in pastures and uncropped areas but has the potential to invade cropped fields as well. The most important means of spread is through the manure of cattle that have grazed in infested pastures and are subsequently transported to uninfested areas. There are currently no quarantines or other controls of cattle shipments in place. Seeds are also spread in bags of composted manure sold to gardeners, in hay from infested pastures, and by wildlife. This plant is known colloquially as "the weed from Hell."

ARS conducts research on TSA in Tifton, Georgia, Stoneville, Mississippi, and Raleigh, North Carolina. In all cases the work is cooperative with other federal and state agencies including APHIS, Cooperative Extension Service, and State Experiment Stations. Preliminary plans have also been made to convene an informal working group of state and Federal personnel from Florida, Alabama, Georgia, Mississippi, and North Carolina. This group will share information and coordinate efforts regionally to assure effective attack on this serious weed problem.

ARS research on TSA at Tifton, Georgia involves: biology and life cycle characteristics of TSA; screening for herbicide efficacy on TSA; and developing a databank on herbicide efficacy that can be used by other researchers and by field workers for spot-spraying outbreaks. At Stoneville, Mississippi research on TSA includes: survey data to prove the means of spread of the weed; and physiology and pathology of TSA. At Raleigh, North Carolina, ARS research has described the range of climates in which the weed will survive and grow, thus enabling prediction of where the weed might become established.

The funding for TSA in FY 1995 is \$149,400.

Question: Describe for the Committee the current situation with TCK Smut. What progress has been made in researching this disease? What are your plans and funding needs?

Answer: Despite the extensive scientific information shared with the People's Republic of China (PRC) on the negligible risk of introduction of TCK to PRC wheat production from U.S. wheat imports, the PRC continues to set a zero tolerance for TCK on U.S. wheat and to embargo wheat exports from the Pacific Northwest.

TCK smut is not a disease of economic importance in U.S. wheat production for two reasons--the relatively high inherent level of disease resistance in most U.S. varieties, and the very specific environmental conditions (time, temperature, snow cover) required for infection. Most recently, a newly released commercial seed treatment called Dividend has proven 99% effective in preventing TCK infection. Widespread use in the Northwest is anticipated.

ARS will continue TCK research that is relevant to issues raised by the PRC. Collaborative studies between the PRC and ARS have resulted in agreement on a statistically-based method for identification of TCK. ARS is also conducting multiyear field studies to establish the concentration of TCK spores needed to produce infection. A milling study with TCK contaminated wheat is underway to determine the distribution of TCK spores in milled products and byproducts. Trade issues such as TCK and other phytosanitary issues will increase in importance with the implementation of GATT and NAFTA, and will require a significant increase in resources for a budget already highly constrained by other high priority problems.

Question: Please explain your research program to combat Barley Yellow Dwarf. What is the level of funding for this program in fiscal years 1994-1996?

Answer: Barley yellow dwarf is considered to be the most important virus disease of small grain cereals in the world, affecting primarily barley, oats, triticale, and wheat. It occurs extensively in the United States and there is a need to develop crop varieties resistant to barley yellow dwarf as quickly as possible. The goal of the ARS barley yellow dwarf virus (BYDV) research program is to develop and transfer to cereal crop producers technology to prevent or reduce economic losses due to BYDV.

The purpose of the research at Ithaca, New York, is to characterize the viral pathogen and develop technologies to detect the virus in plants and in insect vectors. This research includes determination of the structure, reproduction, and movement of the virus in the host plant and in insect vectors.

The purpose of the research at West Lafayette, Indiana, is to study host-virus interactions and determine mechanisms of resistance at the cellular and molecular levels.

The research at Brookings, South Dakota, Urbana, Illinois, and Aberdeen, Idaho is directed toward evaluation of plant germplasm for resistance to the virus and several species of insect vectors that feed on cereal crops, development of improved germplasm and new varieties of cereal crops, and development of disease management strategies based on the biology of the disease under natural conditions.

The research at Lincoln, Nebraska, is concerned with the development of BYDV strain detection and identification methods.

The level of funding for barley yellow dwarf virus research is \$952,100 in FY 1994 and \$908,500 in FY 1995 and FY 1996.

Question: Please describe for the Committee your research on peas and lentils. What funding is available in FY 1995 and 1996?

Answer: ARS conducts research on peas and lentils at six locations. By location, the objectives of this research are as follows:

ARS Headquarters--Funds are allocated to field locations for germplasm evaluation.

Albany, CA--Genetic engineering of ethylene responses.

Beltsville, MD--Elucidation of the effects of light on pea plant growth and development.

Corvallis, OR--Characterization of viruses infecting legumes.

Prosser, WA--Evaluation and enhancement of pea germplasm for superior disease resistance; identification of biocontrol and chemical treatments for suppression of soil-borne diseases.

Pullman, WA--Identification of insect and disease resistance in dry peas and lentils; evaluation of germplasm as sources of disease resistance genes; establishment of genetic linkage maps in lentils and dry peas; development of improved varieties; and development of integrated weed management systems.

Funding available for pea and lentil research in 1995 and 1996 is \$1,089,500.

Question: Please describe for the Committee your program in hops and existing resources. What additional resources are required for this program? Where is this research carried out?

Answer: The ARS conducts hops research at Corvallis, Oregon. The existing funding of \$394,700 supports ongoing work to develop improved, high yielding hop cultivars, and to identify and characterize useful hop aroma components. Of this amount, \$68,275 supports a cooperative hops breeding program with Washington State University at the Irrigated Agricultural Research and Extension Center, Prosser, Washington. ARS plans to continue this program with current resources.

Question: Please describe for the Committee your program in rangeland research. Where is this program carried out? What are the resources, by location, for fiscal years 1994-1996?

Answer: The ARS rangeland research program is designed to assure healthy and sustainable rangeland ecosystems that meet society's needs for food, fiber, water, wildlife and recreational opportunities. Research is being conducted in approximately 50 projects at 25 locations in FY 1995 to develop scientific knowledge and provide technology needed to conserve the natural resource base, while enhancing the productivity, sustainability, and ecological health of the Nation's rangelands.

The ARS rangeland research program deals with issues facing the largest of the Nation's terrestrial ecosystems. About 80% of the lands in the 17 western states and about 55% of all United States lands are classified as rangeland. Rangelands are renewable natural resources that are a primary source of food, fuel, fiber, and quality water supply. They are the front line defense against soil erosion, ecosystem instability and degradation, and inadequate supplies of quality water. Periodic drought, atmospheric change, and increased public interest require innovative management strategies that will improve the stewardship of public and privately owned rangelands.

Three fundamental issues drive the ARS rangeland research plan; sustainability, environmental stewardship, and profitability of rangeland based enterprises. Recent strategic planning activities identified 5 areas of focus for the ARS rangeland research program: (1) Water; (2) Soil-plant-animal-atmosphere interface; (3) Genetic diversity and plant improvement; (4) Integrated pest management; and (5) Integrated resource and forage-livestock and wildlife production systems.

The following table lists the locations where ARS's rangeland research is being carried out, and the level of resources for FY 1994, 1995, and 1996.

USDA-ARS Rangeland Research in FY 1994-1996			
Location	FY 1994	FY 1995	FY 1996
Albany, CA	169,800	169,700	--
Beltsville, MD	129,700	176,600	108,300
Boise, ID	571,800	571,300	571,300
Booneville, AR	253,900	293,000	293,000
Bozeman, MT	1,580,300	1,579,200	1,579,200
Buenos Aires, AR	156,100	206,000	206,000
Burns, OR	356,400	356,600	356,600
Cheyenne, WY	697,000	696,400	696,400
College Station, TX	141,200	--	--
Dubois, ID	314,900	314,600	314,600
El Reno, OK	190,200	190,000	--
Fort Collins, CO	395,100	394,800	394,800
Frederick, MD	136,400	126,200	126,200
Las Cruces, NM	659,900	658,900	658,900
Lincoln, NE	140,100	212,300	212,300
Logan, UT	1,510,000	1,508,800	1,508,800
Mandan, ND	564,900	564,400	564,400
Miles City, MT	474,700	474,300	474,300
Montpellier, FR	504,600	504,200	504,200
Reno, NV	545,500	545,000	--
Sidney, MT	154,100	154,000	--
Temple, TX	1,501,400	1,499,200	1,499,200
Tucson, AR	441,900	310,500	310,500
Weslaco, TX	367,800	342,300	342,300
Woodward, OK	1,057,300	1,055,700	1,055,700
TOTAL	13,015,000	12,904,000	11,777,000

Question: ARS performs research on hides and leather. Describe the program, funding and locations involved in this research.

Answer: The hides and leather program is concentrated at the Eastern Regional Research Center, Philadelphia, PA. Total funding for the program is \$1,513,100. This is the only research on hides and leather in the United States, except for the limited product development and technical service activities carried on by individual hide processors, tanneries and chemical suppliers to the leather industry. Hide exports contribute \$2 billion dollars to the national balance of payments, and domestic leather production is close to \$2 billion dollars annually. The research in Philadelphia is strongly influenced by the industry's need to minimize pollution, and is focused in three areas: 1) processing

of cattle hides, from the slaughter-house up to the tannery, to minimize pollutants and retain high quality; 2) pollution reduction in the tanning process, to minimize hazardous waste and leather byproducts going to landfills; and 3) modification of the internal structure of the leather, to achieve a softer product together with better quality control.

Question: Please report on your program and progress on the Russian Wheat Aphid.

Answer: ARS has a major research initiative aimed at developing and transferring to the growers economical, publicly-acceptable, and environmentally-sound Russian wheat aphid control strategies. ARS research on the Russian wheat aphid is directed to the fundamental biology of the aphid, identification of biocontrol agents, the development of resistant plants by germplasm enhancement, and combining all of these factors into an IPM system. More specifically, the ARS research program and objectives on Russian wheat aphid by location are:

Beltsville, MD -- Provide a predictive classification for aphids to aid in development of control methods. Participate in the international program for biological control of Russian wheat aphid.

Brookings, SD -- Investigate seed treatments and genetic modifications to protect wheat from Russian wheat aphid.

Columbia, MO -- Genetically characterize parasitoids of the Russian wheat aphid to enhance likelihood of establishment in the United States.

Ithaca, NY -- Investigate fungal insect pathogens for control of Russian wheat aphid.

Manhattan, KS -- Identify resistance to Russian wheat aphid in wild plants for incorporation into wheat germplasm by genetic manipulation.

Montpellier, France -- Discover, collect, and evaluate predators and parasites of Russian wheat aphid in France, China, Hungary, Israel, and Russia.

Newark, DE -- Evaluate exotic predators and parasites of Russian wheat aphid in quarantine.

Stillwater, OK -- Identify and characterize genotypes of cultivated and related wheat and barley species that are resistant to Russian wheat aphid, and release cereal germplasm to breeders. Rear, release, and evaluate natural enemies of the Russian wheat aphid for use in the control of this insect pest.

In terms of progress, parasites and predators of Russian wheat aphid are continuing to be introduced and their impact is being evaluated by ARS and State scientists, with some species now established in Colorado. At the ARS facility in Stillwater, Oklahoma, good levels of resistance to feeding by Russian wheat aphid have been demonstrated in wheat, barley, triticale, rye, and grasses after evaluating over 50,000 accessions from the ARS germplasm collection at Aberdeen, Idaho. Studies are now in progress on the genetics of resistance. One barley germplasm line and two wheat germplasm lines were released to private and public plant breeders during 1993. ARS scientists are making excellent progress toward development of an efficient and cost-effective IPM system based on integration of plant resistance, natural enemies, cultural practices, landscape/agroecosystem management, and a Geographical Information Systems (GIS) database.

Question: What are the resources applied to this program in fiscal years 1994-1996?

Answer: The resources appropriated for Russian Wheat Aphid are \$2,517,000 in 1994, \$2,514,600 in 1995 and \$2,499,600 in 1996.

Question: Please describe for the committee your research in the area of no-till cropping. What are the major advantages and disadvantages to this program in terms of profitability, yield, and environmental concerns?

Answer: ARS research on no-till cropping systems includes assessment of effects of ceasing tillage and leaving crop residues on the surface, as occurs in natural ecosystems, on: erosion, runoff, infiltration, evaporation of water from the soil, precipitation use efficiency, weed populations, carryover of diseases and insects, soil temperature, and crop production. Related research which is helping to solve the problems and optimize the benefits of no-till management systems includes studies on effects of crop rotations on disease, insect and weed control, and of winter cover crops on erosion control and increasing soil organic matter and sustained crop production.

Major advantages of no-till management systems include: (1) complete control of erosion on most fields in most years; (2) increasing soil organic matter resulting from cessation of tillage and resultant decreased rates of biological oxidation of soil organic matter; (3) increased precipitation use efficiency due to increased infiltration, decreased evaporation from the soil, and deeper rooting of crops; (4) increased populations of beneficial soil organisms such as earthworms, nitrogen fixing rhizobia, and mycorrhizae which facilitate entry of water and nutrients to roots; and (5) greater bearing strength of the soil and consequent earlier access to fields for essential operations following rain storms.

Disadvantages include: (1) cooler soil temperatures in the spring and consequent delays in crop growth initiation; (2) carryover in undecomposed crop residues of some host specific diseases and insects; and (3) poor stands and reduced yields can occur since many drills and planters are not able to place seed in good contact with the soil when there are crop residues on the surface.

Long-term no-till farmers claim greater profitability for no-till systems. Conventional till farmers, including a few who have tried no-till for a short time, are convinced that no-till reduces profitability. Research is needed to identify crop species or varieties that grow better under cool, moist spring conditions and/or are good rotation crops, to break the disease and insect cycles and allow seasons when weeds can be eliminated with low cost, effective, environmentally benign herbicides. Significant progress is being made by the equipment industry in developing drills and planters capable of seeding through crop residues. While significant improvements in no-till crop production systems under many soil and climatic conditions remain to be made, there are some conditions under which no-till has practically eliminated runoff, increased water use efficiency, yields, net returns and ground water recharge, and has thereby become the system of choice for many farmers.

Question: How long has the no-till cropping research program been underway in ARS? How do you coordinate this effort with other research institutions and private industry? What resources are applied to no-till cropping in fiscal year 1995?

Answer: Evaluations of effects of no-till cropping systems on runoff, erosion, soil organic matter, and crop yields were initiated in ARS studies at Coshocton, Ohio, in 1964. Positive results obtained from those evaluations and other studies have led to initiation of no-till and reduced till research at Mandan, North Dakota; Akron, Colorado; Bushland, Big Spring, and Temple, Texas; Morris, Minnesota; Watkinsville, Georgia; Oxford, Mississippi; Columbia, Missouri; Auburn, Alabama; Lincoln, Nebraska; Pullman, Washington; Pendleton, Oregon; Kimberly, Idaho; Urbana, Illinois; Florence, South Carolina; and Ames, Iowa.

Since problems and benefits of no-till management are highly dependent on climate, soils, crops, and their specific pests, most of the ARS research on no-till systems in the major crop producing areas of the U.S. has been planned in coordination with the Natural Resources Conservation Service (NRCS), Land Grant Universities and cooperators, and conservation oriented farmer organizations such as the National Association of Conservation Districts. On a national scale, coordination of this research is facilitated by the Conservation Technology Information Center (CTIC), a non-profit, member-guided information transfer and referral center established

under the auspices of the National Association of Conservation Districts. CTIC brings together representatives of manufacturers of farm equipment and crop protection chemicals, seed companies, farmer organizations, USDA action and research agencies (NRCS, CSREES, ARS, and ERS), universities, and information media for report and discussion meetings twice yearly. CTIC has evaluated rates of adoption of improved practices, which has helped the relevant industries prepare stocks of the new equipment, seed, and crop protection chemicals needed by farmers to adopt the improved practices. CTIC evaluations have also helped identify areas in which additional research is needed. A major portion of this research is done in cooperation with farmers, who perform the field operations, while ARS scientists measure and analyze the effects.

ARS research involving development and evaluation of no-till management systems for crop production is funded at \$3,616,200 in FY 1995.

Question: Please provide information on the status of ARS' potato research, including the location and funding level for fiscal year 1995 and proposed for 1996, as well as the purpose of the research.

Answer: The ARS potato research program by location is as follows:

ARS Headquarters--Funds maintained at headquarters are allocated for extramural research on ring rot, early dying, and scab disease problems, aphid and beetle control, marketing, and variety development.

Albany, CA (PGEC)--Development of new genetic engineering techniques and expression of economically important genes in potato.

Albany, CA (WRRC)--Improved potato quality and disease resistance using plant cell transformation and other genetic engineering techniques.

Aberdeen, ID--Development of improved pest resistant varieties and disease management strategies.

Beltsville, MD--Germplasm evaluation, enhancement, and breeding improved varieties; protoplast fusion and other genetic engineering techniques; processing germplasm introductions; pathogen-host interactions and genetics of pest resistance; and biological control of potato insects. Field trials in support of the breeding program are conducted at Presque Isle, Maine.

East Grand Forks, MN--Physical properties and other factors associated with processed potato quality; volatiles and prediction of potato quality from bulk storage; processing quality factors of potatoes following storage; evaluation of potential new varieties for processing attributes; and inhibition of sprouting.

Fargo, ND--Marketing, storage, and inhibition of sprouting.

Frederick, MD--Characterization and genetics of new and exotic strains of fungal pathogens of potato, especially the potato late blight disease pathogen.

Ithaca, NY--Evaluation of potato germplasm for nematode resistance; biology and integrated management of the golden nematode based on host resistance, cultural practices, biological control, and soil fumigation.

Madison, WI--Classification, evaluation, preservation, and distribution of introduced germplasm; potato genetics and cytogenetics; and protoplast fusion and other genetic engineering techniques.

Orono, ME--Control of potato disease and nematodes; development of integrated pest management strategies; and determination of soil and water stress effect on potato production.

Peoria, IL--Determination of the chemical mode of action of potato sprout inhibitors.

Philadelphia, PA--Biochemical nature of the interaction of potato pathogens with host plant; mycotoxin production in plants; and improved food processing methods for potatoes.

Prosser, WA--Evaluation and enhancement of potato germplasm, including use of genetic engineering techniques, development of new improved varieties, and methods of disease control.

Weslaco, TX--Biological control of sweetpotato whitefly and diamondback moth on vegetable crops.

Yakima, WA--Insect behavior; insect ecology; biological control; and improved non-pesticidal methods to control potato insects.

ARS funding and staff years on potato research, by location and fiscal years, follow:

<u>Location</u>	<u>FY 1995 Funds</u>	<u>FY 1996 Funds</u>
Aberdeen, ID	395,200	395,200
Albany, CA (PGEC)	291,600	291,600
Albany, CA (WRRC)	1,669,100	1,669,100
Beltsville, MD	3,236,500	2,793,300
E. Grand Forks, MN	1,065,900	0
Fargo, ND	290,000	290,000
Frederick, MD	173,300	173,300
Ithaca, NY	272,400	272,400
Madison, WI	625,300	625,300
Orono, ME	599,400	0
Peoria, IL	284,400	284,400
Philadelphia, PA	77,700	77,700
Prosser, WA	1,036,500	1,386,500
Weslaco, TX	92,300	92,300
Yakima, WA	845,600	845,600
Headquarters*	1,422,900	1,122,900
Total	12,378,100	10,319,600

*Funds are provided for cooperative research to the following States: Idaho, Massachusetts, Maryland, Michigan, Minnesota, North Carolina, North Dakota, New York, Ohio, Oregon, Pennsylvania, Washington, Wisconsin, Wyoming, and Colorado FY 1995.

Question: How much is ARS currently allocating to research on alternatives to methyl bromide? How much is included in the fiscal year 1996 for this purpose? Please indicate what progress has been made.

Answer: For fiscal year 1995, ARS has allocated \$13.1 million for research on methyl bromide alternatives. The same amount is proposed for fiscal year 1996.

Since methyl bromide was identified as an ozone depleting material, research to find alternatives has recently accelerated. However, ARS has for many years been developing non-chemical procedures to replace chemical soil and postharvest fumigations, and thus already has several accomplishments in this area.

Postharvest treatments ARS developed or assisted in developing include cold treatment of citrus and carambola from Florida for export to Japan; pest-free certification for walnuts to be exported to New Zealand; heat treatments for papaya and cold treatment for carambola from Hawaii to be exported to Japan and transported to mainland U.S.; and phosphine fumigation of hay for transport to Japan.

Accomplishments pertinent to replacing methyl bromide as a soil treatment include improved strawberry and vegetable varieties with increased resistance to some soilborne diseases and pests; microbiological agents for the biological control of some soilborne diseases of vegetables and ornamental crops; improved cultural practices, such as soil preparation, crop rotation systems, and altered planting dates, to mitigate the effects of some soilborne pests of strawberries, vegetables, and ornamental crops; and improved pesticide formulation and application technology for available chemicals other than methyl bromide to control plant parasitic nematodes.

The most recent accomplishments include the following: the parameters for electrical pasteurization of soil to a depth of 2 feet in 72 hours were established; chloropicrin, alone, was found to be as effective as the methyl bromide/chloropicrin combination for the growth and yield of strawberry plants; in non-fumigated

soils, verticillium wilt was caused by lower fungal populations than anticipated, suggesting that losses to this disease in the absence of methyl bromide may be greater than expected; methods to more accurately measure methyl bromide emissions from tarped fields were developed; and application of commercially available fungal biocontrol agents reduced the incidence and severity of crown and root rot in tomato and pepper transplant beds.

Question: The fiscal year 1996 request includes an increase of \$1.0 million to assess agricultural dust emissions to reduce agriculture's contributions to small particle dust (PM-10) subject to regulation under the Clean Air Act of 1990. How much is ARS currently spending on the study of PM-10? Please give us a summary of the progress you are making in this area.

Answer: ARS is currently spending in FY 1995 \$391,800 on PM-10 research. The studies are being conducted by units based at Manhattan, Kansas; Big Spring, Texas; and Pullman, Washington. These units are conducting studies in the states in which they are located and in a number of other states including Nevada and California. Progress is being made in understanding the factors influencing the emission of PM-10 dust to the atmosphere, and this understanding is being expressed in mathematical models. At this point, there appear to be strong relationships between the mass of soil movement measured by traditional wind erosion methodologies and the generation of PM-10 dust, which means that traditional controls for wind erosion have a strong possibility of also being controls for PM-10 dust emission. ARS is also making substantial progress in methodologies to determine the source of dust particles collected in municipal samplers around the country. ARS has found weaknesses in the current samplers for PM-10 dust, in that at the high wind speeds under which wind erosion occurs, the samplers are collecting particles considerably larger than ten microns in diameter. The agency is experimenting with ways to make the samplers operate more effectively.

Question: Several years ago, the committee directed the agency to establish added efforts in soybean composition research, soybean production agronomy, and soybean plant breeding at the Ames, Iowa and Stoneville, Mississippi locations. Would you please give us a progress report on the work which has been established with these funds.

Answer: In response to Congressional action, funds were added at Ames to determine genetic regulation of oil and protein in soybean and to accelerate the development of new varieties with improved oil and protein composition. The current soybean research program at this location is aimed at developing a database on soybean genetics, and generating a map of quantitative and qualitative traits to locate them precisely on the chromosomes. This pursuit includes mapping of traits that confer improved oil and protein quantity and quality, and identifying markers that allow the traits to be followed. The map will enable breeders to select for specific traits much more easily than currently. In addition, ARS collects, maintains, identifies, and distributes cytogenetic stocks and wild accessions of soybeans for use by researchers and breeders. The work at Ames is at the center of a national, multi-agency effort to characterize the soybean genome and make the information available for soybean breeders and other researchers.

At Stoneville, funds were added to the program to provide southern soybean producers with improved oil and protein content and with disease and nematode resistance. Soybean breeding research at this location is in progress to develop insect, pathogen, and nematode resistance; early maturity; high seed protein and oil with high yield; and better adaptation to Southern production conditions to allow lower production costs. Production research at this location is aimed at developing biological control and other new control technologies for important soybean insects; new technologies for weed control, particularly with conservation tillage; practices that minimize herbicide persistence in the soil

and movement to groundwater; crop management and irrigation practices to minimize the detrimental effects of summer drought; optimized tillage practices; and new technology for safe and accurate application of pesticides.

Question: The establishment and growth of the blueberry industry in Mississippi and the Southeastern United States has been attributed largely to work done at the USDA Small Fruit Station in Poplarville, Mississippi. Please give us a report on the work being done at this station. What is the current level of funding for this research station and what level of support is included in the fiscal year 1996 budget?

Answer: There are two research projects at Poplarville. One project develops improved small fruit cultural and management practices and new genetic lines for small fruits, both blueberries and strawberries, in the Gulf Coast region of the U.S. The goal is to minimize production losses from pests and environmental stress, improve fruit quality, and conserve resources in the production of small fruits in this region. Recent developments from ARS research in Poplarville include new varieties of strawberries with superior resistance to anthracnose disease, and new rabbiteye blueberries with good vigor, improved earliness, and better disease resistance. The other project is devoted to developing cultural practices for muscadine grapes to improve production efficiency and fruit quality, and to minimize fruit rot. It also develops methods by which byproducts of muscadine grape industries can be utilized by the food industry.

Funding at Poplarville for FY 1995 and FY 1996 is \$808,800 for each year.

Question: The fiscal year 1996 budget requests an increase of \$2.5 million for preharvest pathogen reduction research and \$5.0 million for postharvest pathogen reduction research. What is the current level of funding for this research and what future funding do you estimate will be required to complete this work?

Answer: The ARS has allocated \$7,837,200 for preharvest and \$8,647,200 for postharvest pathogen research in fiscal year 1995. We expect there will be a continuing need for this funding plus the \$7,500,000 addition in fiscal year 1996 because of the complexity of the research needed to develop practical control methods for all of the presently recognized pathogens, and the possibility that additional pathogens may be recognized in the future.

NUTRITION RESEARCH

Question: Diet is related to major diseases of heart, cancer, stroke, diabetes, etc. NIH as well as the Department carry out research in this area. Do the research missions distinguish the areas of research carried out by each agency or is there duplication of effort in this area?

Answer: The human nutrition research mission of the Department and NIH are distinct and are not duplicative. The human nutrition research mission of ARS is to determine nutrient functions and requirements in healthy people at all ages and usual physiological and activity conditions; to determine the nutrient composition of food; and to monitor the food and nutrient consumption of the U.S. population. The NIH conducts nutrition research in relation to incidence and treatment of specific diseases. They conduct research on prevention of disease, but with specific application to disease entities. Such overlap of research activities as may exist are necessary for scientific verification of research results. The Interagency Committee on Human Nutrition Research (ICHNR) and the Interagency Board for Nutrition Monitoring and Related Research (IBNMRR) act to assure communication and coordination of nutrition research and monitoring to prevent duplication and enhance benefits. The USDA Under Secretary for Research Education and Economics and the HHS Assistant Secretary for Health cochair these coordination activities. These committees meet regularly and have representation from all federal agencies engaged in nutrition activities.

Question: What additional resources are required by ARS to fully operate its nutrition centers?

Answer: The funding and staff required for each of the Nutrition Centers, if they were operated at full capacity are as follows:

Beltsville Human Nutrition Research Center, Beltsville, Maryland--The total funding to operate the Center at a full capacity of 50 scientists is \$35.7 million, requiring an increase of \$17.2 million from current base funding.

Reaching full staffing and funding would allow generation of knowledge to better define the role of foods and food components in preventing nutrition-related disorders in the biochemically, culturally and age diverse population. Areas of research expanded by the increase would include: full staffing of the diet facility for human metabolic studies (\$2.5M); development of standard methods for nutrient composition of foods and reference materials for validation of analysis (\$3.5M); characterization of individual variation in energy balance related to diet (\$1.4M); modeling and systems analysis approaches to study nutrient kinetics (\$2.0M); interactions of nutrients in foods (\$0.8M); and continued monitoring of food consumption of total population and population sub-groups (\$7.0M). Approximately \$10.5 million of this expanded research will be accomplished through cooperative agreements and contracts.

Grand Forks Human Nutrition Research Center, Grand Forks, North Dakota--The total funding to operate the Center at a full capacity of 24 scientists is \$10.7 million, requiring an increase of \$2.6 million from current base funding.

Full staffing and funding of the Center would promote increased knowledge of human mineral requirements, to promote optimal function throughout life and to provide information for decisions concerning provision of a healthful food supply to the United States population. Areas of research impacted by an increase would be: effects of marginal or deficient trace element intake and status in adolescents and Native Americans on physiological and biochemical responses, cognitive functions, chronic diseases and adaptations to environmental factors, including airborne oxidants, chemical and ionizing radiation (\$1.3M); trace element requirements of elderly people and adolescents (especially during the adolescent growth spurt and during cyclic weight loss of the general population), and importance of trace element and magnesium nutriture in bone metabolism (\$1.0M); and systems analysis of nutrient requirement data to assist decisions about recommended intakes (\$0.3M).

Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, Massachusetts--The total funding to operate the Center at full capacity of 50 ARS and contract scientists at this ARS government owned contractor operated facility is \$18.0 million, requiring an increase of \$3.4 million from current base funding.

Full funding and staffing of the Center would allow development of information about safe and adequate nutrient intake and identification of factors that may contribute to the degenerative processes associated with aging. Specific research areas impacted by an increase will be: interrelationships of diet (including antioxidants exposure), genetics and cell metabolism with immunological and other disorders of aging (\$1.7M); and relationships of diet with maintenance of physical, neurological and cognitive functions in aging (\$1.7M). Most of the expanded research will be accomplished through cooperative agreements.

Children's Nutrition Research Center at Baylor College of Medicine, Houston, Texas--The total funding to operate the Center at full capacity of 50 ARS and contract scientists under a General Cooperative Agreement is \$16.0 million, requiring an increase of \$5.3 million from current base funding.

Full funding and staffing at the Center would allow expansion of present programs defining the nutritional needs of pregnant women, infants, and young children. Increases in specific research areas include: energy and protein needs for growth, development and body

composition of breast fed and formula fed infants (\$1.5M); beneficial effects of human milk in host defense and on gastrointestinal function (\$1.25M); regulation of cholesterol synthesis during lactation (\$1.25M); and dietary factors regulating preborn and infant growth, especially in adolescent mothers (\$1.3M). Approximately \$4.5 million of this expanded research will be accomplished through cooperative agreements.

Western Human Nutrition Research Center, San Francisco, California--The total funding to operate the Center at full capacity of 30 scientists is \$12.0 million, requiring an increase of \$6.8 million from current base funding.

Full staffing and funding would allow expansion of present projects and initiation of studies in new areas directed towards meeting the Center's missions of developing knowledge on nutrient requirements and nutritional assessment methodology. Specific research areas impacted by a budget increase would include: improving, evaluating, and implementing the computerized electronic approach to dietary assessment designed for independent use by lay subjects (U.S. Patent pending) (\$1.3M); expansion of support services in areas of body composition, energy metabolism and dietary assessment (\$1.0M); expanding research programs on diet and antioxidant metabolism (\$1.0M); field testing of indications (biomarkers) of nutritional status (\$1.0M); and expanding present programs in diet and immunology and use of stable isotopes to study vitamin metabolism (\$2.5M). Some of the expanded research activity will be performed through cooperative agreement with a university such as the University of California.

The fiscal year 1996 USDA explanatory notes indicate that pursuant to the Department of Agriculture Reorganization Act, 1994, the nutrition policy and promotion functions were transferred for fiscal year 1995, along with \$2.218 million and 31 staff years, from the ARS to a new "Nutrition Initiatives" account under the Food and Consumer Service to establish a Center for Nutrition Policy and Promotion. In a further letter to me on this subject, USDA Acting Secretary Rominger points out that the use of the funds has not changed, only the reporting relationship of these functions.

Question: (a) What specific functions or activities were transferred from ARS to the Center for Nutrition Policy and Promotion?

Answer: The program functions transferred from ARS to the Center for Nutrition Policy and Promotion (CNPP) via a memorandum of understanding between the Departments' Research, Education and Economics (REE) and Food and Nutrition Consumer Service (FNCS) mission areas are: (1) analysis of the economic well-being of families and the impact of food cost on dietary status and food intake profiles, and updates of the child cost estimates and family food plans, including the Thrifty Food Plan; (2) analysis of trends in the nutrient content of the United States food supply; (3) preparation and publication of the bulletin "Nutrition and Your Health: Dietary Guidelines for Americans" based on the Dietary Guidelines Advisory Committee Report; and (4) evaluation of effective communication techniques and development of dietary guidance materials for nutrition and health professionals and consumers.

Question: (b) What specific tasks were the staff transferred from ARS to the Food and Consumer Service performing at ARS?

Answer: Prior to the transfer, ARS staff were primarily involved with tasks and activities associated with the functions transferred. The only additional prior ARS activity not transferred was research on food consumption and how it is related to socio-economic and demographic characteristics and to nutrition knowledge and attitudes. This research is needed to provide the base for identifying nutritionally vulnerable populations and designing nutrition intervention strategies that will be effective. In the transfer of ARS staff to FCS, research on the determinants of dietary intake was kept within ARS.

Question: (c) Which of the functions transferred from ARS to the Center would you characterize as "policy" or "promotion" functions?

Answer: None of the four functions transferred were policy functions. However, the two analysis functions can be characterized as policy related, since they provide an econometric basis for policy decisions. The other two transferred functions, that is, publications of dietary guidance material, are characterized as "promotion".

Question: (d) Does ARS believe that the functions and activities transferred are more appropriately responsibilities of the Food and Consumer Service? Why?

Answer: These functions and activities can be appropriately conducted in the Food and Consumer Service. Analysis activities can be conducted in conjunction with or independent from research activities, and thus could be placed in either ARS or CNPP. The promotion activities are better suited for CNPP than ARS because they need to be coordinated closely with the nutrition education and promotion activities already existing in FCS, such as the new school lunch nutrition promotion activities.

Question: (e) Please define ARS' jurisdiction with respect to nutrition research and education and related activities?

Answer: ARS has current jurisdiction with respect to nutrition research and education and related activities through the following legislative authorizations.

Department of Agriculture Organic Act of 1862. In the legislation that established the USDA, Congress called for "the general design and duties of which shall be to acquire and diffuse among the people of the United States useful information on subjects connected to agriculture and rural development." Subsequently, nutrition was specified as one such subject.

The Smith-Lever Act of 1914. This legislation directed USDA to undertake cooperative extension work with State and local agriculture agencies "in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics..." A 1953 amendment specified nutrition as well as agriculture and home economics as such information topics and authorized "the necessary printing of information."

The Bankhead Jones Act of 1935. This act, as amended, 1946, required USDA to "conduct and to stimulate research into the laws and principles underlying the basic problems of agriculture in its broadest aspects, including but not limited toresearch into the problems of human nutrition and the nutritive value of agricultural commodities, with particular reference to their content of vitamins, minerals, amino and fatty acids, and all other constituents that may be found necessary for the health of the consumer and to the gains or losses in nutritive value that may take place at any stage in their production, distribution, processing, and preparation by the consumer...and including such investigations as have for their purpose...the maximum contribution by agriculture to the welfare of the consumer."

The Research and Marketing Act of 1946. This act explicitly authorized research into problems of human nutrition and the nutritive value of agricultural commodities within the USDA.

The Food and Agriculture Act of 1977, Title XIV--National Agricultural Research, Extension, and Teaching Policy Act of 1977 established USDA as the lead agency of the Federal Government for research, extension, and teaching in the food and agricultural sciences, and directed that research into food and human nutrition be established as a separate and distinct mission of the Department. With the 1977 legislation, Congress supported USDA's traditional emphasis on the nutritional needs of normal, healthy individuals. Recognizing, however, that nutrition research necessarily addressed the issues of maintenance of health and the prevention of disease, Congress expressed the needs for coordination between the Department and the Department of Health and Human Services. In Section 1405, the Act states that:

"The Department of Agriculture is designated as the lead agency of the Federal Government for agricultural research (except with respect to the biomedical aspects of human nutrition concerned with diagnosis or treatment of disease),...and the Secretary, in carrying out the Secretary's responsibilities, shall...establish jointly with the Secretary of Health, Education and Welfare procedures for coordination with respect to nutrition research in areas of mutual interest..."

In Section 1421(b), the 1977 Act states: "It is hereby declared to be the policy of the United States that the Department of Agriculture conduct research in the fields of human nutrition and on nutritive value of foods and conduct human nutrition education activities..."

Agriculture and Food Act of 1981. In an amendment to the Food Stamp Act of 1977, Section 1322 authorizes the Secretary to extend food and nutrition education to reach food stamp participants. In Section 1329, the Secretary is requested to implement pilot programs to test various means of measuring, on a continuing basis, the nutritional status of low-income people. An amendment of Title XIV of the Food and Agricultural Act of 1977 (Section 1425), required the Secretary and the Secretary of HHS to formulate and submit to Congress within 180 days a plan for a human nutrition research management system.

The National Agricultural Research, Extension, and Teaching Policy Act Amendments of 1981. This legislation emphasized the partnership between the Federal Government and the States, and expressed support for human nutrition: "...there is an increasing need to address nutrition research and educational issues associated with diet resulting with changing lifestyles and with respect to special groups such as the elderly, teenagers, infants, and pregnant women." The Act requires that "results of agricultural research are effectively communicated" to all users who can benefit therefrom, including consumers. "Food and nutrition" is specified as a component of food and agricultural sciences covered in the Act.

Food Security Act of 1985. Section 1451 reaffirms the Department as the lead Agency of the Government for human nutrition research (except with respect to the biomedical aspects of human nutrition concerned with diagnosis or treatment of disease); requires the Secretary to establish research into food and human nutrition as a separate and distinct mission of the Department of Agriculture; and states that the Secretary has established a nutrition education program. Furthermore, Section 1452 requires the Secretary to submit a comprehensive plan for implementing a national food and human nutrition research program (submitted in 1986) and each year thereafter an annual report on human nutrition research activities.

Responsibilities of ARS. The ARS has administered in-house human nutrition research since 1953, succeeding the organizational structure called Bureau of Human Nutrition and Home Economics. Research was conducted at the Beltsville, MD Agricultural Research Center. In 1966, a regional Human Nutrition Laboratory was established in Grand Forks, North Dakota by Congressional action. By later Congressional actions, in 1979, the ARS' Children's Nutrition Research Center was established at the Baylor College of Medicine, Houston, Texas; the ARS Human Nutrition Research Center on Aging was established at Tufts University, Boston, Massachusetts (95th Congress, Report No. 95-1579); and the Western Human Nutrition Research Center was transferred to ARS from the U.S. Army (DOD Appropriation Bill).

In 1995, a nutrition program to be administered by ARS was established at the Arkansas Children's Hospital, Little Rock, Arkansas, and the research mandate of ARS was extended to the establishment of a nutrition intervention research program in the Lower Mississippi Delta (Arkansas, Louisiana and Mississippi) (103rd Congress, 2nd Session, Senate Report 103-290).

The jurisdiction related to nutrition monitoring resided in ARS until 1982 when it was transferred to the Human Nutrition Information Service. In 1994 (House Report 103-153), that function was returned to ARS.

Question: The Committee has directed that ARS carry out an investigation on diet and health with special emphasis on alcohol consumption as it relates to cardiovascular health. What progress has been made in this research?

Answer: The Beltsville Human Nutrition Research Center has completed the experimental phase of a study comparing red wine with and without alcohol, alcohol in pure form, and a similar amount of energy from carbohydrate added to diets providing two levels of fat content.

Preliminary analyses of the data show a mixed response to alcohol; in one study period there was a negative effect of alcohol on the immune system and during the second period there was no effect. The impact of the non-alcohol components of wine has not yet been fully separated. Statistical analyses are near completion and should be final by the end of October 1995.

The controlled diet phase of the investigation of the metabolic effects of regular consumption of red wine was completed on April 1, 1994. Forty three subjects completed the study.

Calorimetry data show no difference in energy expenditure when consuming ethanol compared to carbohydrate, which supports the calorimeter data from other laboratories. Using handbook values for the energy value of the food consumed and the changes in body energy content measured in this study, we have calculated energy expenditure over the entire study. The balance data agree with the data from other long term consumption studies in which ethanol is shown to provide little utilizable energy to the diet due to a decrease in digestibility of dietary protein.

Analysis of preliminary data on blood lipids and lipoprotein shows that alcohol improves the lipoprotein profile, but the wine treatment was not significantly better than the alcohol alone.

Question: The fiscal year 1996 request proposes \$7.0 million to conduct a survey on Nutrition Monitoring and Food Composition. You indicate that this survey is being conducted to support EPA's need for data. Please explain.

Answer: A 1993 National Academy of Science report indicated that there was not sufficient food intake data to conduct a comprehensive risk assessment of the effect of pesticide residues on infants and children. EPA requested USDA to expand the food consumption database for specific age groups to provide the statistically sound science base needed for pesticide regulatory policy. Additional food intake data are needed to set pesticide tolerance levels for infants and children. The tolerance levels will provide greater assurance of protection from potential pesticide risks for this subpopulation. Infants and children eat relatively larger quantities of food for their size and therefore may have higher exposures on a body weight basis. The food intake data also will contribute to the databases used in determining and ensuring the availability of cost-effective pest management practices in agricultural production. Detailed food intake information, involving two nonconsecutive 24-hour recalls, obtained from a nationally representative sample of 4,300 infants and children will be required. USDA has the nutrition and statistical expertise, and has continuing Federal responsibility for acquiring food consumption data for this and future uses.

Question: Last year ARS received an appropriation of \$1.5 million for six universities in the Lower Delta to carry out the Lower Delta Nutrition Initiative. What progress is being made by each university towards implementing the program? How much is included in the fiscal year 1996 request for this initiative?

Answer: To initiate the project, the \$1.5 million funding was divided equally among the six universities and ARS. Specific cooperative agreements between ARS and each of the six institutional partners were executed January 1, 1995. An ARS site team of researchers in the subject matter field visited each of the institutions in March. Representatives from the six partners and nutrition intervention specialists will meet April 26-28 to develop a vision statement and strategic plans. Subsequent meetings will be held in the summer to fully develop specific aspects of the project.

In fiscal year 1996, the ARS budget includes a request for additional funding of \$1 million, bringing the fiscal year total for this initiative to \$2.5 million.

Question: Please provide a summary of ARS' nutrition research for the last two years showing location, focus and the amount of funding provided for each project.

Answer: The following table provides a summary of ARS nutrition research by location in 1994 and 1995.

<u>Center</u>	<u>FY 1994</u>	<u>FY 1995</u>
Beltsville Human Nutrition Research Center Beltsville, MD	\$18,462,600	\$18,462,600
Grand Forks Human Nutrition Research Center Grand Forks, ND	8,141,200	8,141,200
Human Nutrition Research Center on Aging at Tufts University Boston, MA	14,575,800	14,575,800
Children's Nutrition Research Center at Baylor College of Medicine Houston, TX	10,709,100	10,702,200
Western Human Nutrition Research Center San Francisco, CA	5,159,300	5,159,300
Arkansas Children's Hospital Research Institute Little Rock, AR	-0-	1,100,000
Nutrition Intervention Study (LA, AR, MS)	50,000	1,550,000
National Agricultural Library	700,000	800,000
Other Locations	4,682,600	2,656,100
 Total	 \$62,480,600	 \$63,147,200

The focus of the research is as follows:

Beltsville Human Nutrition Research Center, Beltsville, Maryland, is examining nutrient/gene relationships in the diverse population to better form recommendations for individual's and groups' nutrient needs. The Center is responsible for leadership in food composition methodology and maintains the National Nutrient Data Bank. Food consumption monitoring is conducted to determine national patterns and needs of special groups.

Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University, Boston, Massachusetts, is concerned with identifying the nutrient needs for aging adaptation and limiting the risk of cardiovascular diseases, cancer, osteoporosis, immune function disorders, cataract formation, and loss of cognitive and physical function.

Grand Forks Human Nutrition Research Center, Grand Forks, North Dakota, continues its pioneering research on human mineral and ultratrace element requirements for health and disease prevention, and is leading in the development of systems analysis of nutrient requirements.

Children's Nutrition Research Center, Baylor College of Medicine, Houston, Texas, is establishing the nutrient requirements to prevent low birth weight babies, particularly in pregnant adolescents, and nutrient needs for children's development to sustain healthful life.

Western Human Nutrition Research Center, San Francisco, California, is establishing markers of nutritional status and the relationship of dietary intake, physical exercise and genetics in healthy weight.

Other research locations include the Arkansas Children's Hospital Research Institute where research is conducted on the effects of diet on cognitive and behavioral development of children. Research on nutritional qualities of plants and animals is conducted at ARS regional research laboratories in Peoria, Illinois, Ithaca, New York and Albany, California.

WATER QUALITY RESEARCH/MIDSOUTH RESEARCH CENTER
APPLICATION TECHNOLOGY RESEARCH UNIT

Question: What kind of research are you conducting in the area of water quality? What has been determined through your research in this issue over the past decade?

Answer: The ARS water quality program has been greatly expanded since 1990 to better understand the impact of prevailing and alternative farming systems on ground and surface water quality. Coordination of ARS and collaborative water quality research with other USDA agencies is provided through the USDA Working Group on Water Quality. The three principal ARS research emphasis areas are: 1) to improve farming systems for reducing degradation of water quality by agricultural chemicals; 2) to develop strategies for the offsite control of chemical buildup in ground water; and 3) to develop chemical application technologies for increasing fertilizer use efficiency and targeting pesticides to specific soil, crop, and pest conditions.

Research, particularly in the Midwest where the greatest usage of agrichemicals occurs, has shown that pesticides seldom leach below the root zone to contaminate ground water supplies above the maximum contaminant levels (MCLs) established by the Environmental Protection Agency. Current MCLs for atrazine and alachlor, two of the more commonly used herbicides, are 3 and 2 parts per billion (ppb), respectively. These are very low concentrations (e.g., 3 ppb is equivalent to 3 seconds in 32 years). The most serious ground water problem for both irrigated and non-irrigated cropland is nitrate contamination. The use of alternative farming systems and nitrogen best management practices can improve nitrogen crop-use efficiency and reduce nitrate leaching to ground water. An emerging water quality problem is pesticide contamination of surface water supplies, primarily from surface runoff that occurs in the spring following chemical application.

Question: Please list the recent accomplishments of the projects which have been funded through water quality research.

Answer: Some of the accomplishments of the water quality research projects are listed below:

Animal waste management. In West Virginia and Kentucky, researchers found that grazing agriculture significantly affects water quality in the karst aquifer, and strict use of best management practices are needed to protect groundwater resources. Best management practices include sinkhole caps, improved animal waste management treatment facilities, and pasture fencing and rotations. Large commercial beef and dairy feedlots located near clay-bottomed playa lakes in the Southern Great Plains can be used for feedlot runoff and waste storage without posing a major threat to the underlying groundwater. Caution, however, needs to be observed around the coarser-textured playa rim where deeper leaching of soluble chemicals may occur.

Economic and social studies. A survey in central Ohio studied the utility of existing approaches to motivate land owners/operators to adopt soil and water conservation practices for water quality enhancement. The results show willingness by a significant number of owners to participate in a wetlands development program. However, the results also indicate that future conservation programs should place greater emphasis on private market mechanisms and less emphasis on government "command and control" approaches to achieve national environmental goals. In the Platte Valley of Nebraska, farmer interest in reducing nitrate-nitrogen pollution of groundwater from irrigated agriculture is high; 77 percent of the farmers identified groundwater contamination as their biggest problem. Converting

from furrow irrigation to sprinklers to maximize uniformity of fertigation and water application would cost about 50 cents per pound of N removed. A watershed-scale study in Missouri indicated that no single farming system was dominant in terms of maximizing profits and either reducing soil erosion or improving surface water quality or groundwater objectives.

Farmstead assessments. Pilot projects across the U.S. and in Ontario, Canada, show that the Farmstead Assessment System (Farm*A*Syst) effectively assists farmers and rural residents to identify pollution risks on their property, and results in cost-effective voluntary actions to reduce those risks. The NRCS is developing a computer program on Farm*A*Syst through Field Office Computer Systems (FOCS) that will be available at all local NRCS offices. Evaluations in South Dakota show that petroleum storage, feedlot management, and livestock waste storage are the top three pollution problems, respectively, on farmsteads.

Fate and transport of agricultural chemicals. The Management Systems Evaluation Areas (MSEA) program in 8 of the 11 Cornbelt States has studied the leaching of atrazine (the most widely used corn herbicide) under field conditions. Atrazine concentrations in the groundwater are well below the 3 parts per billion (ppb) Maximum Contamination Limit (MCL), but the highest concentrations of atrazine have been found in groundwater at three irrigation locations. South Dakota researchers showed that the amount of atrazine leached from ammonia-treated soil was 30 to 60 percent more than the amount leached from unfertilized soil. They recommend injecting fertilizer into the soil and closing the fertilizer slot with a packer, or alternatively, using other nitrogen sources that do not influence pH to the extent ammonia fertilizers do. Research in Minnesota found that freezing and thawing can have both positive and negative influences on nutrient and herbicide movement. Although a net downward movement of chemicals of only inches was measured in any one season, over time this may result in chemical movement out of the root zone and into the groundwater. Farmers are encouraged to modify the timing of nitrogen applications from the fall to a combination of spring-summer applications to enhance environmental safety. Studies at the Missouri MSEA demonstrated that soil cracking in claypan soils may have a greater influence on chemical movement than tillage.

Midwest management systems evaluation areas. The Midwest MSEA projects have shown that no-till and other conservation tillage practices along with precision inputs of fertilizers and herbicides can reduce or nearly eliminate nonpoint source water quality problems in a cost-effective manner. The Iowa MSEA project demonstrated that buffer strips on the edge of or within fields can reduce runoff of three herbicides by up to 40 percent for both natural and simulated rainfall conditions. The Northern Cornbelt Sand Plains MSEA projects in four States (Minnesota, North Dakota, South Dakota, and Wisconsin) have shown that a ridge-tilled corn and soybean rotation with herbicide banding over the row, separate nitrogen applications when needed, and conservative irrigation to supplement rain will maintain or improve groundwater quality. Results from the Missouri MSEA study showed that farmers on the claypan soils must use cropping and chemical diversity in their farming systems if long-term herbicide and nitrate-nitrogen are to be kept below the drinking water standard. In some cases, fractures in claypan make it possible for contaminated surface water to adversely affect groundwater quality. The Nebraska MSEA found that split applications of nitrogen fertilizer using fertigation and surge flow furrow irrigation practices can significantly improve groundwater quality. Under the center-pivot sprinkler irrigation farming system, nitrate-nitrogen concentrations were reduced from 27 to 17 ppm in the groundwater from 1991 to 1993. The Ohio MSEA showed that herbicides will remain in clay soils of high organic matter for long periods of time.

Precision farming techniques. Research on precision farming (site-specific crop management) showed that yield mapping and depth to the claypan, as measured by electromagnetic induction (EMI) equipment, are key factors needed to apply fertilizer and herbicides at varying rates within a field. Results to date suggest that yields are generally as good with a variable rate compared to the single rate nitrogen treatments, while post-harvest soil nitrate levels were generally less with the variable rate nitrogen treatment. EMI mapping in Iowa also showed that a number of soil chemical properties can be measured using this precision farming technology. Geographic Information Systems (GIS) for mapping historical crop yields and soil properties are being tested along with chemical application equipment and Global Positioning Systems (GPS) to apply variable rates of nitrogen and herbicides throughout the Midwest and in many other parts of the United States in terms of improving water quality.

Plant and soil testing. Scientists, consultants, and producers are now using chlorophyll meters on lettuce, cotton, wheat, sorghum, corn, potato, cranberry, alfalfa, sugarbeet, and rice to monitor and schedule nitrogen applications. The pre-sidedress soil nitrate test (PSNT) was successfully used in Maryland, Pennsylvania, and other North Atlantic States for the identification of nitrogen-sufficient sites which need little or no additional sidedress fertilizer N. A quick and easy immunoassay technique has been developed to determine atrazine residue concentrations in soils, but it is not suitable for measuring atrazine degradation and transformations.

Nutrient management. In Massachusetts, a hairy vetch-rye cover crop mixture in rotation with sweet corn reduced nitrogen fertilizer applications, maintained corn yields, and decreased nitrate-nitrogen pollution in the groundwater. In Minnesota, new deep-rooted alfalfa varieties have been identified for greater removal of nitrogen than either reed, canarygrass, or switchgrass. These varieties are designed as cover crops to reduce soil erosion, short-term high nitrogen fixation for green manure crops, and removal of nitrate-nitrogen from deep soil profiles. When all the nitrate has been removed, the alfalfa varieties turn yellow. At the Northern Cornbelt Sand Plains MSEA project, the ridge-placed nitrogen fertilizer resulted in less nitrate leaching than furrow-placed nitrogen under ridge-tillage and sprinkler irrigation conditions. Nitrate leaching was also less where anhydrous ammonia fertilizer was sidedressed in the day furrow and a low energy precise application (LEPA) irrigation system applied water in alternate furrows.

Tillage management. No-till crop production into 10 years of grass sod after the conservation reserve program (CRP) minimized soil degradation and reduced nitrate losses in surface runoff. In some of the northern Midwest States, ridge-tillage systems are new and have great potential to reduce herbicide usage and energy expenditures in tillage, control soil erosion by water and wind, enhance early season growth, improve management of poorly drained soil, and control field traffic to reduce soil compaction. Under a corn-soybean rotation in northeastern Iowa, no-till and ridge-tillage systems resulted in lower nitrate-nitrogen losses in the subsurface drain water than with moldboard and chisel plow systems. Herbicide losses to subsurface drainage water were somewhat higher for the no-till and ridge-tillage systems. For the various tillage studies, no-till typically results in reduced runoff of agricultural chemical while the concentration or amount of chemicals being leached can be higher depending on site-specific crop, soil, drainage, and climatic factors.

Water and irrigation management. In the irrigated areas of Idaho, growing corn or cereal without tillage following alfalfa efficiently utilized nitrogen from the legume and reduced nitrate-nitrogen losses. Technologies for reducing irrigation-induced erosion include applying small concentrations of polyacrylamide (PAM) into the irrigation water, applying cheese whey alone and in combination with straw, and placing straw into the furrows. The use of PAM in Idaho research studies has reduced sediment loss by

an average of 95 percent and increased water infiltration by about 17 percent. Subsurface drip irrigation can minimize and sometimes eliminate nitrate-nitrogen leaching below the crop root zone. Reducing irrigation amounts in combination with restricting flow from the subsurface drains has been shown to reduce the short-term need for the disposal of drainage water containing salt and toxic trace elements.

Water table management. Controlled drainage reduced total nitrogen losses via drainage outflows by as much as 48 percent and subirrigation reduced total nitrogen losses via drainage by as much as 66 percent for corn production in the North Carolina lower coastal plains. Drainage to remove excess wetness early in the growing season followed by subirrigation reduced concentrations of nitrate and herbicides in the drainage water and resulted in soybean yields of 70 to 80 bushels per acre and 190 to 200 bushels per acre corn yields in Ohio.

Water quality models and decision support systems. The Nitrate Leaching and Economic Analysis Package (NLEAP) has been shown to be an excellent indicator of potential nitrate-nitrogen leaching hazard under irrigated and nonirrigated conditions for a wide range of nitrogen treatments. NLEAP in combination with county soil maps can efficiently identify nitrate leaching "hot spots." The Root Zone Water Quality Model has been effectively used to evaluate the effects of management practices on plant growth and water quality at the various MSEA sites when soil physical and hydraulic properties are known. Future research will look at refinements and predictions under alternative management practices and systems. A new multi-objective decision model has also been developed to evaluate and select agricultural management systems that minimize surface and ground water pollution and are economically viable.

Wetlands and riparian areas. Constructed wetlands have been shown to consistently lower nitrate-nitrogen concentrations in water from a dense swine and crop production watershed in North Carolina. However, it appears that more oxygen would be beneficial for long-term removal of both nitrogen and phosphorus in colder months. Enhanced oxidation might be obtained by sequencing other land treatment methods such as overland flow or media filters with constructed wetlands. As part of the USDA Herring Marsh Run Water Quality Demonstration Project, researchers and extension specialists have constructed an in-stream wetland which has effectively reduced nitrate-nitrogen from 6 ppm to 1 ppm during most of the year. Generally, a riparian buffer system consisting of grass buffers located upslope from forest vegetation provides for nearly complete filtering of nutrients and heavy metals from a swine effluent lagoon in Georgia. In central Iowa, a multi-species riparian buffer strip system consisting of trees near the creek or streambank, followed by a strip of shrubs, and another buffer strip of grasses has been highly effective in reducing nutrient and sediment movement with the surface runoff from agricultural fields.

Weed and herbicide management. A new ultra-low volume (ULV) system for application of herbicide in paraffinic oil has achieved better weed control than conventional application equipment at half the herbicide rate. Also, a weed sensor system has been developed to apply herbicides only when a weed is detected. Several small companies are interested in commercialization of the ULV air-assist spray system and the weed-sensor technology. A computerized decision aid is being evaluated in North Carolina for making recommendations regarding preplant incorporated, preemergence, and postemergence herbicides for use in soybean and corn crops. A bioeconomic weed/crop management decision aid is also being developed and tested to make site-specific weed management decisions in the Midwest for both dryland and irrigated conditions.

Pesticide reduction. An ARS Pesticide Properties Database (PPD) has been developed to provide water quality modelers and managers with a list of the pesticide properties most important for predicting the potential of pesticides to move into ground and surface waters under a range of soil and climate conditions. Some of the soil insecticides used to control corn have been detected in

surface and ground water. Over the past 5 years, a semi-chemical-based insecticide (carbaryl) bait has been developed which can reduce the total insecticide active ingredient applied to corn by 90 percent.

Question: As a part of water quality research, what level of funding is being directed toward the development of accurate data which documents pre-existing conditions of water quality, in comparison to the water quality improvement which occurs after additional conservation practices are implemented on the farm?

Answer: In the Management System Evaluation Areas (MSEA) projects, "base line" data were obtained at the start of the projects in 1990, and each field site included a standard practice. Thus, continuing data collection provides a comparison between standard and alternative practices. The expenditures to obtain data on preexisting conditions are estimated to be \$3 million per annum.

Question: As part of the water quality research funding provided to ARS by Congress, a small increment of support is directed to the Application Technology Research Unit (ATRU) at the Midsouth Research Center. What level of funding is directed to the ATRU from the account of water quality research funds? What level of support does the Application Technology Research Unit receive from the agency in total, including all sources of funding?

Answer: In FY 1995, \$270,000 of ARS water quality research funds were provided to the Application and Production Technology Research Unit to develop more efficient methods of applying herbicides. The cropping systems and mechanization expertise in this unit will enable large field scale evaluation of improved application technology and spraying practices and integration of these practices into crop production systems. The results should provide producers with a wider range of tools to address environmental and sustainability issues in a cost-effective manner. The unit was allocated a total of \$1,995,700 ARS funds for FY 1995, which includes \$310,000 in temporary funds.

Question: Does the agency feel that the Application Technology Research Unit (ATRU) possesses real potential in terms of improving water quality?

Answer: Yes, the APTRU has already made significant progress in developing new and improved spray application technology in several areas. Improved air-assist equipment has been developed to apply pesticides in ultra-low-volume (ULV). Application of herbicides such as Poast® and Select® in mineral oil at 1-2 quarts per acre decreased the rate of active ingredient required by 2-4 fold as compared to conventional applications in water at 10-20 gallons per acre. Significant increases in deposition and penetration of insecticides into cotton canopy were obtained through the use of airfoil winglets on an aircraft sprayer boom. Each of these procedures will improve water quality by reducing the amount of pesticide needed to control pests, resulting in less material for potential movement from target sites to surface water or through the soil profile to the ground water.

Question: To what extent does ARS feel that the ATRU can impact environmental and economic issues confronting production agriculture as a result of the conventional use of crop protection materials?

Answer: ARS is confident that the research program of the APTRU will continue to develop application technologies and spraying practices that will reduce the total quantity of pesticides used, increase on-target deposition, and reduce drift or loss from intended targets without loss of efficacy, all without significant cost increases.

For example, research on sensor technology to identify and spray weeds within a crop should reduce the total quantity of herbicides used during production of a crop. Progress continues on developing equipment that aids the aerial pilot to more accurately determine speed and height of the aircraft. Automatic controls are also being developed to turn on and off spray boom using height and/or critical locations such as boundaries within a field from global positioning systems (GPS). These technologies should greatly reduce off target drift.

Question: How much additional funding does the ARS intend to direct to the ATRU as a part of the Integrated Pest Management proposed in the FY 1996 USDA budget?

Answer: Approximately \$350,000 of the requested funds for the Integrated Pest Management Program will be provided to the APTRU. The planned research will focus on evaluation and/or modification of spray drift models using improved application technology and spraying practices.

Question: What percentage of the total support for ATRU, is directed at aerial application technology projects?

Answer: During FY 1995, 50 percent of the APTRU funds will be devoted to aerial application research.

Question: Does the agency need the unlimited and unrestricted use of an aircraft at the Midsouth Research Center in order to sufficiently conduct meaningful research on aerial application?

Answer: The APTRU currently leases an aircraft for its research on a cropping season basis. Past experience with this arrangement has proven restrictive because of limitations on time availability and aircraft modification for experimental purposes. The research unit needs long-term access to a turbine-powered aircraft under conditions that permit modifications to the aircraft and attached spray equipment. The ability to conduct tests during the entire year would provide for more effective resource utilization while obtaining experimental results in a more timely manner.

Question: What is the current arrangement for providing needed aircraft support to the ATRU? Are there any restrictions currently imposed on the use of such aircraft?

Answer: Beginning with the 1995 cropping season, the Agency leased a turbine-powered aircraft from a private company in order to provide the APTRU with greater flexibility for modifications and more annual operating time. A lease is being negotiated that will provide an option for annual renewal through FY 1998, as well as an option to purchase. The lease will also permit necessary modifications to the aircraft and attached spray equipment.

Question: Is there anything the committee can do to improve the conditions for providing aircraft support to the Midsouth location, in an effort to adequately meet the full needs which ATRU has in terms of aerial application research?

Answer: Continued committee interest and support of the APTRU research program that is addressing very complex agricultural production problems with ever increasing environmental and contracting/purchasing constraints are essential to the long-term viability and success of the unit.

POTATO RESEARCH

Question: How is ARS working with the private sector on refocusing research to meet industry needs?

Answer: ARS meets with the National Potato Council yearly to determine research needs and to rate extramural grant proposals for competitive funding. As a result of the Potato Council's expressed priorities at the annual meeting in December 1994, adjustments were made in the distribution of extramural funds to focus on the industry's most important research needs. ARS has also sent a representative to yearly meetings of the National Potato Council to explain the agency's research program and to obtain comments and criticism from the industry.

ARS also meets regularly with regional and state potato grower groups at many of the ARS laboratories that conduct potato research.

Question: We have heard a lot about potato Late Blight. What is the magnitude of the problem in terms of geographic spread and market losses?

Answer: Losses to late blight in the 1994 growing season totaled about \$200 million, including loss of crop to the disease (\$50-100 million) and the costs of fungicide and fungicide application in attempts to control the disease (\$100 million).

Since 1992, severe late blight epidemics have occurred in Maine, New York, Pennsylvania, Florida, Georgia, North Carolina, South Carolina, New Hampshire, Minnesota, North Dakota, Michigan, Wisconsin, Washington, and California.

Question: What research is being conducted on the spread of Late Blight in potato storage? How is potato seed physiology during storage being monitored through research?

Answer: The ARS late blight research program is conducted at four locations and addresses these issues through various projects, as follows:

Aberdeen, Idaho--Development of resistant or tolerant varieties, and characterization of the nature and genetics of resistance to late blight.

Beltsville, Maryland--Development of resistant germplasm and varieties by conventional plant breeding and biotechnology; determination of the ecology of the pathogen; determination of the mechanism(s) of resistance; and mapping of resistance genes.

Frederick, Maryland--Characterization of the virulence, pathogenicity, and genetics of different strains, races, and types of the pathogen; development of improved pathogen detection and identification methods; and development of methods to reduce the stability of the pathogen.

Madison, Wisconsin--Transfer of late blight resistance genes from wild potato-related species into cultivated varieties using tissue culture and other biotechnological techniques to overcome natural barriers to gene transfer.

Orono, Maine--Crop and soil management impacting potato production, principally the locally based potato industry. This program is proposed for closure in the President's FY 1996 budget.

Seed potatoes may be providing pathogen inoculum for spread of the disease during storage. The best approach to eliminating this problem is to minimize the inoculum brought in from the field. The studies at Frederick to improve pathogen detection methods, when they reach fruition, will be extremely valuable in reducing late blight losses during storage.

Question: Did ARS personnel meet with the Red River Valley Potato Growers Association after they developed their five-year plan?

Answer: Members of the ARS National Program Staff anticipated meeting with the Red River Valley Potato Growers Association immediately after receiving their five year plan. However, the proposed five-year plan was received in late January 1995, and before a meeting could be scheduled, the President's proposed budget for FY 1996 included closure of the ARS East Grand Forks location. As a result, ARS delayed further discussions pending Congressional action on the budget proposal.

Question: Could the administration of the East Grand Forks facility be moved to the USDA/ARS facility in Fargo, North Dakota, and still maintain its research as proposed in the five-year plan?

Answer: A program limited in scope to pilot plant evaluation at East Grand Forks could be administered from the ARS Fargo location.

Question: Why couldn't this program be used as a pilot program to show the cooperative efforts between private industry, North Dakota State University, the University of Minnesota, and the Red River Valley Potato Growers Association?

Answer: The ARS potato research program at East Grand Forks could serve as pilot or model program to demonstrate public-private cooperation. However, in order to ensure adequate funding for higher priority projects, the President's proposed budget does not provide the resources for ARS to actively participate in such a partnership.

Question: The potato blight problem today is the same one that is famous for the Irish potato famine of the last century. Why hasn't it been cured? What research is presently being conducted to address this issue now that it is in major potato producing area of the United States (Maine, Michigan, New York, Pennsylvania, North Dakota, Wisconsin, and Minnesota) and is moving westward? What kind of research is necessary to solve this disease?

Answer: Until recently, late blight has been successfully managed in the U.S. with improved varieties and by applying protectant and systemic fungicides. Recently, a new type of the fungus migrated from Mexico to the U.S., and the new type is largely unaffected by the only systemic fungicide registered for this purpose.

ARS carries out a coordinated national research program on late blight, including germplasm enhancement for late blight resistance, genetics of resistance, and pathogen detection, characterization, and ecology. This program is led and coordinated by horticultural and plant disease specialists at ARS headquarters. Development of resistant varieties is an especially promising avenue of research, and ARS is pursuing this goal through both conventional selection and genetic engineering techniques.

Ideally, control of late blight will be achieved through integrated pest management, which will include as its components crop resistance, appropriate cultural and storage practices, reduction of pathogen survival and aggressiveness, early detection of the pathogen, and use of safe, effective pesticides when necessary. In January 1995, ARS hosted a workshop on late blight which identified high-priority research goals: (1) determine the biology and ecology of new races of the pathogen; (2) characterize and monitor pathogen populations; (3) breed for disease resistance; (4) enhance disease resistance through biotechnology; (5) standardize disease trials; and (6) reduce disease losses during storage. Progress toward these research goals will allow an effective integrated management strategy to be developed.

Question: Two major cotton insect pests in the Midsouth are tobacco budworm and beet armyworm. The Committee is aware that the Southern Insect Management Laboratory at Stoneville is conducting research on two separate strains of biological virus which possess the capability of reducing large populations of damaging tobacco budworm and beet armyworms in cotton, respectively. The committee has specifically directed funds to support projects aimed at the area-wide management of tobacco budworm through the use of such a biological virus. We would like a progress report on the status of this program and a report on any progress which has been made in the development of similar technology which might be available for the control of beet armyworms.

Answer: Congress provided \$500,000 additional funds to the ARS Southern Insect Management Research Laboratory in FY 1994 for the area-wide pest management pilot program in the Mississippi Delta to control the tobacco budworm. Prior to this increase the pilot program was funded at \$150,000 from base funds. Efforts in FY 94 emphasized the use of a nuclear polyhedrosis insect virus (Elcar®) in reducing populations of bollworms and budworms in cotton by applying the virus to early-season weed hosts prior to cotton planting. As a part of this program, methodology was developed so that large quantities of the viral insecticide could be produced in vivo in order to treat up to 215,000 acres, or a 20-mile diameter land area. Between April and May of 1994, 195,000 acres were treated that resulted in at least 53 percent less bollworm/budworm moths captured in the test area. Daily trap captures revealed moth reductions as high as 91 percent. In FY 1995, the laboratory plans to treat 201,000 acres in the Mississippi Delta to validate the information obtained in the FY 1994 study, as well as to improve application methods and to study the impact on bollworm/budworm populations in an expanded test.

ARS views this pilot test program of the use of a biological insect virus to reduce populations of tobacco budworms in cotton as a model system that will have applicability to other serious caterpillar pests, including the beet armyworm (BAW). Beet armyworms are known to be susceptible to a particular virus, and the highly-specific agent has been isolated, characterized, and field-tested on a small scale by ARS scientists. This virus can be evaluated in a manner similar to the tobacco budworm project, once the tobacco budworm pilot test is completed. The BAW virus kills nearly twice as fast as the virus that kills the tobacco budworm.

Research is also being carried out on a celery looper virus, which has a broader host range than either the tobacco budworm or the BAW viruses, yet kills both of these pests.

Question: What amount of funding is included in the FY 96 request for this program?

Answer: The ARS FY 1996 budget request includes funds for continuation of this program. The proposed level of funding is \$650,000, the same as in FY 1995.

Question: Will this research be supported by the Integrated Pest Management effort?

Answer: The area-wide pilot test IPM programs are considered an integral part of the USDA IPM initiative, and therefore is supported by the USDA Integrated Pest Management effort.

Question: Since the agency has emphasized the need for accelerating integrated pest management, the committee would like to know if there have been specific steps taken to accelerate the biological virus projects on tobacco budworm and beet armyworm at the Midsouth Research Center, since it is the goal of these projects to significantly reduce the number of pesticide applications necessary in cotton production.

Answer: ARS has requested for its FY 1996 budget that Congress continue to provide \$650,000, so that this important pesticide reduction project may continue to its completion in a timely fashion. Additionally, the Southern Insect Management Laboratory at Stoneville, Mississippi has temporarily reallocated \$120,000 from the FY 1995 base funds to the tobacco budworm project in order to accelerate the program.

Question: At what stage of development are these projects and when does the agency feel that it will be in a position to release the results of such a project for possible commercial use in cotton production?

Answer: A mass production system has been developed for obtaining insect virus in sufficient quantities to treat up to 215,000 acres. Successful large-scale field tests of the virus on the tobacco budworm were completed in 1994 on 195,000 acres. Improvements in application methods and validation of the results from 1994 will be carried out in 1995. By 1996 it is felt that this biological control technology for tobacco budworm should be ready for transfer to the agroindustry. Contacts with the industry have been positive in terms of their interest in producing the tobacco budworm virus in sufficient quantities for commercial use by affected growers. To date, testing of the beet armyworm virus has mainly been with the use of small-scale field plot studies. Large scale field tests have not been scheduled, but at least two years of such large-scale field studies will be required to demonstrate its effectiveness for control of the beet armyworm on cotton.

NATIONAL AGRICULTURAL LIBRARY

Question: Who are the primary users of material and electronic information available at the National Agricultural Library (NAL)? What type of information is requested?

Answer: NAL's diverse clientele includes researchers, educators, policy makers, business leaders, farmers, consumers of agricultural products, the news media, professional societies and private organizations with an agricultural focus, students, the general public at large, and, increasingly, foreign agricultural organizations. Approximately 5,000 foreign exchange partners throughout the world receive USDA publications through the NAL Gift & Exchange Program. These partners include foreign government agencies, scientific societies, international associations, research organizations, and universities. NAL also provides services to USDA employees, ranging from responses to traditional reference and document delivery requests to electronic database searches for information.

The type of information requested falls into the following general categories:

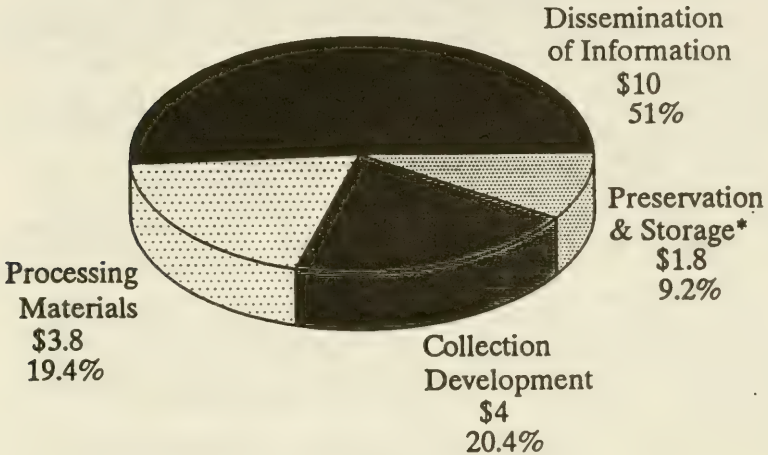
- Individuals seeking answers to specific questions, desiring to locate information on a specialized topic, or trying to identify contact persons or organizations.
- Organizations seeking to develop collaborations that will make information available to a specialized audience or on a specific topic (e.g., NAL Information Centers covering agricultural trade and marketing, alternative farming systems, aquaculture, biotechnology, food safety and nutrition, plant genome, rural development and health, technology transfer, water quality, and youth development).
- Users accessing NAL electronically to request information about NAL services and publications, and assistance in accessing worldwide electronic agricultural information resources.
- Individuals, institutions and USDA employees using the bibliographic records and abstracts contained in NAL's AGRICOLA database and online catalog.
- Individuals requesting expert assistance in locating and identifying obscure, rare or hard-to-find information.
- Libraries requesting photocopies of articles or loans of books needed by their patrons to perform research, work duties, etc.
- USDA employees requiring photocopies of articles or loan of original materials to perform their duties.
- Individuals and institutions requiring access to original source documents to perform historical research.
- Individuals and institutions requesting NAL's expertise in developing electronic resources, establishing electronic library and information services, and in establishing and managing information centers.
- Institutions seeking to become exchange partners to receive USDA exchange titles and/or surplus items.

Question: Your funding level proposed in FY 1996 is \$19.6 million. Please describe for the Committee the organizational and program activities and resources involved in operating the National Agricultural Library.

Answer: The mission of the National Agricultural Library (NAL) is accomplished through three principle organizational components: 1) Public Services Division, which includes reference and document delivery services and the NAL information centers; 2) Technical Services Division, which oversees collection development activities and the cataloging and indexing of materials for the AGRICOLA database; and 3) Information Systems Division, which supports all automation and database activities of the Library.

The resources devoted to library program activities is depicted in the following Pie Chart.

National Agricultural Library
Distribution of Resources
 Fiscal Year 1996 Total Budget \$19.6 Million
(Dollars in Millions)



**Includes cost of maintaining NAL Building*

Question: Does NAL charge for any of its services? Please describe the pros and cons of user fees for library information services. Does the Library of Congress or the National Library of Medicine charge user fees?

Answer: Yes, NAL does charge fees for reference and document delivery services. These services include both manual and online searching, photocopying of materials and reproducing NAL microfilm or microfiche. For document delivery, NAL charges for photocopies or paper copies made from microform at the rate of \$5.00 for the first ten pages, and \$3.00 for each additional ten pages thereafter. Charges for duplicating microfiche are at the rate of \$5.00 for the first microfiche, and \$.50 for each additional microfiche. Microfilm owned by NAL is duplicated at a cost of \$10.00 for each reel.

Reference and computer search services are provided free for the first hour of staff time and the first \$25.00 in computer search service fees. Subsequent reference service costs \$11.00/hour for professional time and \$5.00/hour for clerical time. Computer costs above the initial \$25.00 are billed in full.

The National Library of Medicine charges fees for interlibrary loan service, purchase of preservation microfilm and online computer searches if the databases involved are not available locally. The Library of Congress provides free photocopy of materials up to 25 pages, then various charges for special photocopy service or extended service.

There are a number of pros and cons of charging user fees for library information services. The pros include the fact that user fees promote service levels based on need and demand and that charging fees often has a rationing effect on user consumption. Fees may help to discourage the frivolous use of library services, even though the fees themselves often cover only a small portion of

the total cost of providing service. Overall, charging fees is thought to encourage a more efficient use of public resources by recognizing that "free access" to information does not necessarily mean that access is without cost.

On the other hand, the United States has a long-standing tradition of providing free library services. Fees are also considered discriminatory since they ensure that only those who can afford to pay may obtain special information services. On a practical note, many believe that the imposition of user fees on information services tends to depress the demand, rather than produce revenue. Similarly, the cost of administering and collecting fees may outweigh any financial benefits to the library. Overall, the professional information community holds the general belief that library and information services are a public good, and free access to information is a fundamental right of citizens in a democratic society.

Question: What is NAL's vision for information collection and dissemination in the 21st century, and how will it differ from your current activities?

Answer: We believe that the increasing availability of electronic information will bring a host of complexities to the information collection and dissemination activities in the 21st century. These complexities will require the development of a new expertise to handle complicated licensing and copyright issues, and also to develop the electronic publications to replace the paper versions.

It is also clear that collecting and providing electronic access to agricultural information in the 21st century will require broad cooperation and participation within the agricultural information community. This is because providing exhaustive access to global agricultural information resources will depend on the development of a systematic approach to the access and dissemination of information.

We term this cooperative vision "AgNIC" -- the Agricultural Network Information Center. The Agricultural Network Information Center is envisioned as a distributed, discipline-oriented source of agricultural information in electronic form, made available systematically over the expanding global information infrastructure. Growing out of a review of the existing agricultural information landscape, AgNIC defines our view of NAL's future role in the worldwide distributed network of electronic information resources. The concept has evolved into a shared vision for our electronic future, and forms the framework for linking the resources of all agricultural information service providers to improve access to information.

Question: Please describe the current impact of Internet and the information superhighway on NAL's operation and clientele.

Answer: Both NAL's operation and clientele have been significantly affected by the electronically networked environment termed the "Internet." Based on prior testing and evaluation, NAL has been handling reference requests over the Internet since 1993. NAL also accepts requests for document delivery services over the Internet, which also include requests for information about NAL holdings. Document delivery is also accomplished using a system for electronic document transmission and receipt. A number of NAL Information Centers routinely make information available via the Internet. For example, our Biotechnology Information Center makes many materials available electronically to a worldwide audience, while also using the Internet extensively to answer reference questions. NAL also provides users with interactive access to NAL's Plant Genome Database, which contains genome data from a growing variety of species groups, together with pertinent bibliographic data from NAL's AGRICOLA database, and links to other databases such as the ARS GRIN -- Germplasm Resources Information Network -- database.

Overall, NAL staff can more readily access international and national databases, directories, and professional discussion groups to provide a higher quality and quantity of information to users. In turn, we believe that NAL users receive higher quality

information services in addition to more rapid responses to questions.

Question: The fiscal year 1996 request includes \$962,000 to begin the process of making more of the library's information services available electronically and \$500,000 to begin the conversion of deteriorated print materials into electronic formats. What is the total projected cost of both these initiatives?

Answer: We estimate that to fully implement the Electronic Information Initiative will require roughly \$15 million dollars, over a ten-year period. The focus during the initial years will be to develop the infrastructure needed to support the access, control, and dissemination of electronic information. Later, emphasis will be placed on obtaining access to full text and scientific databases either through direct purchase or by leasing access rights.

NAL has not determined the cost of electronically preserving all the information in its collection. Part of the reason is that we do not envision digitizing the collection, in its entirety, in the foreseeable future, and any cost estimate that might be valid today would be very short-lived. Further, arriving at such a figure with a reasonable degree of accuracy, is complicated by the difficulty in projecting an average cost for related expenditures which might be necessary to prepare a volume for digitization, especially if it is deteriorated. Finally, the preservation effort is envisioned as a cooperative effort of nationally organized and coordinated projects based at NAL, land-grant institutions, and at other libraries, societies, and archives with important collections.

Nevertheless, we have been able to make some cost determinations by pricing selected, discreet segments of the NAL collection. In these cases, we have estimated the cost of creating a CD-ROM containing 7,000 pages of optically-scanned materials stored as images can range from a low of \$13,000 for a CD-ROM that provides minimum-level access suitable for such activities as electronic document delivery to a high of \$43,000 for one that includes state-of-the-art retrieval software and descriptive indexing.

BUILDINGS AND FACILITIES

Question: Please provide the status of modernization efforts at each of ARS' Regional Research Centers, including what has been completed to date and what remains to be done and at what costs?

Answer: The status of modernization efforts at the four Regional Research Centers is as follows:

Southern Regional Research Center (SRRG): Modernization involves a complete renovation of the surrounding site work and the Chemical Wing and includes such items as asbestos abatement, new and upgraded drainage, landscaping, equipment pads, pavement repairs, retaining walls, and handicapped ramps. The interior of the building will include replacement of HVAC systems, reconfiguring each laboratory module, new stairwell to comply with safety codes, replacement of floor finishes, new windows and complete patched, primed, and painted walls and ceilings as necessary. Total cost of the chemical wing modernization is \$19.2 million phased over 8 years.

Design is complete for all phases of the Chemical Wing project. Construction for Phase I was awarded in FY-91 for \$1.4 million. Phase II was awarded in FY-92 for \$2.4 million using Agency funds. Phases III, IV, and V were awarded in FY-92 for \$5 million. In FY-92, \$1,950,000 was specifically appropriated for Phase II. However, this budget line item amount was not sufficient to pay the cost of Phase II which totals \$2.7 million for construction, contingency, and architect-engineer inspection services. The \$1,950,000 was used to award Phase V. In FY-93, \$1,651,000 was appropriated. This funding was used for design and construction of Phase I site repair work. In FY-94, \$2.667 million was appropriated for Phase VI of the Chemical Wing and in FY-95, \$2.934 million was appropriated for construction of Phase VII.

The FY-96 appropriation request is \$900,000 to construct Phase II of the site repair work. It is estimated the completion of the SRRC modernization program will require an additional \$21.6 million to cover the administration and industrial wings.

Eastern Regional Research Center (ERRC): In FY-93, ARS completed the facility modernization study begun in FY-92. The findings indicate that the utilities and building infrastructures have reached the end of their useful lives.

The proposed modernization program will occur in nine phases with a total planning, design, and construction budget of \$39 million over 9 years.

In FY-94, ARS funded design of Phase I (Service Building) and Phase II (Engineering Research Laboratory in Pilot Plant) with \$595,000 in Repair and Maintenance funds.

In FY-95, ARS funded construction of Phase I, and design of Phases III through VII, using \$4,175,000 in Repair and Maintenance funds.

In FY-96, \$4,500,000 is needed to fund construction of Phase II, leaving a balance of \$29,730,000 to complete modernization.

Western Regional Research Center (WRRRC): WRRRC modernization includes the upgrade of outside utilities and complete renovation of the North Wing. The renovation includes asbestos abatement, replacement of HVAC system, laboratory reconfiguration to comply with safety codes, replacement of all laboratory counters and tops, replacement of floor and windows, and completely patch, prime, and paint walls and ceilings as necessary. Total cost is \$28.0 million phased over a 7-year period.

The design is complete for all phases. Phases I and II were awarded in FY-90 for \$5.9 million. Phase III was awarded in FY-91 in the amount of \$3.4 million. Phase IV was awarded in FY-93 in the amount of \$3.0 million. Phases V and VI were awarded in FY-93 in the amount of \$4.4 million and \$3.2 million. Total construction funds committed to date for 6 phases amount to \$20.0 million.

Total funds of \$6.5 million will be required in FY-97 and beyond to award Phase VII construction and A-E support services. In FY-94 and FY-95, \$1.161 million and \$.919 million was appropriated for construction of Phase VII. Fine-tuning of the design for Phase VII is necessary and will start in the second quarter of FY-95. The Agency will fund all necessary fine tuning costs. Additional funds in the amount of \$4.4 million will be required for Phase VII construction and A-E support services.

The Small Animal Facility (West Annex Building) planning, design, and construction is complete for Phase I. Design of Phases II and III was completed in the third quarter of FY-94. The construction of Phases II and III was awarded in the fourth quarter of FY-94. The design and construction costs for all three phases is approximately \$5.0 million.

National Center for Agricultural Utilization Research (NCAUR): The National Center for Agricultural Utilization Research is currently proceeding with a facilities upgrade design and construction program, as follows:

Construction contract was awarded in the fourth quarter of FY-91 for Phase IA - Utility Tunnel, Steam Lines, and Boilers. Construction was completed in the second quarter of FY-95. Total project cost of \$2.5 million is for construction.

Construction contract was awarded in the third quarter of FY-92 for Phase IB - Electrical and Drain Systems Upgrade. Total cost of \$.9 million is for construction. Construction was completed in the first quarter of FY-94.

Total cost for design is \$1,825,000 which was appropriated in FY-92 for Phase II - Pilot Plant and Semi-Works Building Upgrades. The design for Phase II was awarded in FY-92 and is complete.

In FY-92, \$1,825,000 was appropriated for planning and design for the Phase II Pilot Plant. In FY-93, \$1,545,000 was appropriated for planning and design for the Phase III Chemical Wing.

The FY-96 budget request of \$11.7 million is to be combined with the FY-93 \$1.5 million appropriation to construct renovations to the Semi-Works building and the renovations to the North Wing.

Additional funding needed which has been escalated to the planned year of implementation is \$63.0 million. This will complete planned modernization efforts at the Center.

Question: Please provide the Committee with the costs and activities completed and planned at the Beltsville Agricultural Research Center.

Answer: Beltsville Agricultural Research Center (BARC):

Please refer to the attachment (5 sheets) for a listing of modernization projects at BARC from FY-86 through FY-95. The funding source for these projects was a combination of Renaissance 93 funds and Building and Facility Modernization funding.

The modernization of BARC facilities includes the revitalization of the Beltsville Human Nutrition Research Center (BHNRC). The new BHNRC will consist of a 70,000 square-foot new facility on BARC-East near a current BHNRC building of 69,300 square feet which will be gutted and rebuilt. This new 139,300 square-foot complex will include a modern human studies unit. The design will be conducted using FY-96 funds.

To improve the overall animal related research, a study has been funded from FY-94 funds to site new animal buildings and two new office/laboratories which will consolidate the Parasitology Unit, a portion of LPSI, with the existing LPSI complex. This will cluster similar types of research into one area, upgrade the animal facilities to meet animal care guidelines, and improve security for the animals. This will also reduce the overall square footage needed for the LPSI. This approach will provide increased research collaboration and savings through efficiency in operations.

The design of the Controlled Environmental Facility (CEF) is completed. Construction is scheduled for FY-96. This will be used to consolidate growth chambers which are currently scattered in numerous locations including Head Houses, Greenhouses and other miscellaneous structures. This consolidation will reduce staffing needs to monitor the chambers and maintain the plant material. This will also provide an environment where temperatures are controlled and the chambers will function more efficiently.

The remaining funds will be used to design upgrades for electrical, water, steam, sanitary and storm sewer, roads and grounds and telecommunications on portions of the east side of the center.

Beltsville Agricultural Research Center (BARC)
Modernization

Fiscal Year 1986

Computer Room Building 007	\$ 118,000
New Water Services	197,000
Stairwell Enclosures	148,000
Fire Escapes	298,000
HVAC Upgrades, Seven Buildings	255,000
Circle Drive	845,000
Replace Steam Line	525,000
Renovate Building 006 (NFMP*)	1,728,000
Miscellaneous Repair and Maintenance Projects	145,000
TOTAL	4,259,000

Fiscal Year 1987

Renovate Building 163F	\$ 571,000
Exterior Painting	159,000
Retrofit Steam Lines	881,000
Renovate Greenhouse, Range 2	484,000
Design Building 007	386,000
Asbestos Study	163,000
Log Lodge	583,000
Convert Building 1180 to Laboratory	219,000
Miscellaneous Projects	350,000
TOTAL	3,796,000

Fiscal Year 1988

Renovate Building 007 (NFMP*)	\$ 4,710,000
Design Building 003 (NFMP*)	400,000
Relocate Mail Room, Building 012	123,000
BARC Facility Study	1,000,000
Renovate Abattoir, Building 204	482,000
Renovate Building 303	575,000
Modify HVAC, Building 306	110,000
Bridge Repairs	320,000
Soil Conservation Service Road	1,752,000
Water Lines	1,150,000
Miscellaneous Projects, U.S. National Arboretum	153,000
Miscellaneous Projects, BARC (under \$100,000)	1,138,000
TOTAL	11,913,000

Fiscal Year 1989

Renovate Building 003 (NFMP*)	\$ 5,905,815
U.S. National Arboretum Roof Repairs	300,852
U.S. National Arboretum Greenhouse Electrical Repairs	273,200
Steam Lines, Phase IV	1,100,000
Oil to Gas Conversion	328,237
Renovate Building 203 (Boar Facility)	529,026
U.S. National Arboretum, Relocate Service Road	87,643
Hazardous Waste Marshalling Facilities	79,662
Waste Water Treatment Study	194,864
Renovate Building 204	354,335
Beltsville Area Security	91,806
Pesticide Handling Facilities	441,793
Swing Space	274,100
Miscellaneous Projects	1,680,612
TOTAL	11,641,945

Fiscal Year 1990

Steam Lines, Building 169-179	\$ 568,752
Steam Lines, Buildings 001-011A	1,407,084
Range 2 Modernization	690,574
Waste Water Treatment Facility	1,100,056
Electrical Distribution System	574,157
BARC Roads	361,027
Animal Parasitology Unit Planning	30,282
HVAC System, Building 050	44,598
Repair Embankment Failure	211,135
Powder Mill Road	1,547,588
Swing Space	103,685
Brooder House	40,847
Renovate Building 043, 046, 047	148,591
Annual Painting	200,098
Annual Roofing	247,582
U.S. National Arboretum Storage Building	90,402
U.S. National Arboretum Plastic Greenhouses (3)	235,687
Demolition of Facilities	27,985
Replace Chiller, Building 006	103,965
Renovate Building 209	71,693
Renovate Headhouse 16	35,124
Repairs Building 177B	12,465
Repairs Building 211	7,965
Renovate Building 1120	18,391
Elevator, Building 449/Gas Cyl	50,954
Renovate Building 449	4,865
Key Card Security Gate	37,002
Small Miscellaneous Projects	625,031
Repairs, Building	15,000
Contingency Steam Lines	297,170
Contingency	197,604
Replace Roof, Building 012	139,000
Contingency	7,706
TOTAL	9,254,065

Fiscal Year 1991

Small Animal Facility	\$ 128,192
Repair/Replace HVAC, Building 204B	65,418
Annual Painting	283,408
Annual Roof Repairs	276,908
Paving, Building 302	270,200
Replace Structural Defect, Building 254	7,369
Replace Roof Sow Pav., Building 208	55,050
Replace HVAC Equipment, Building 048	21,575
Replace HVAC Equipment, Building 009A	30,338
Replace Roof, Buildings 047A, 048, and 049	46,055
Replace Structural Defect, Building 160C	9,365
Waterproof Basement, Building 402	65,308
Repair Structural Damage, Building 228	15,758
Repair Structural Damage, Building 173	9,115
Repair Structural Damage, Building 217	33,750
Reskin Greenhouse, Building 008	33,031
Renovate Building 043, 046, 047	8,009
Sewage Disposal System	6,500
Architectural and Engineering Inspection Services	75,112
Renovate Swine Facility	80,851
Install Elevator, Building 005	197,625
Renovate Building 007	83,034
Miscellaneous	11,848
Renovate Building 003	6,572
Renovate Buildings 449 and 450	19,606
Swing Space	226,453
Addition, Building 426	57,000
Conference Room, Building 005	399,072
Electrical	255,980
Building 001	725,283
Plant Sciences Building	794,078
Free Stall Barn	149,187
Central Hay Storage	829,863
Repair Building 201	35,020
BARC-East Waste Water Treatment	729,662
Building 200 Modernization	55,233
Renovate Building 007	1,142,131
Study, Building 011A	125,000
Demolition	198,928
Minor Projects	235,239
Swing Space	478,481
TOTAL	8,276,607

Fiscal Year 1992

Install Filters on Spray Fields	\$ 65,132
Replace Roof, Building 002	245,466
Replace Roof, Building 014	154,000
Construct Addition to Building 426	465,004
Alterations, Building 426	96,625
BARC-East Water System Planning Study	110,008
Beltsville Human Nutrition Res. Cntr. Econ. Analysis	375,915
Infrastructure Planning Studies	93,969
Demolition of Facilities	142,628
Repair/Replace Parking Lots, Building 003 and 007	117,092
Contingencies for Unplanned Project	119,252
Telephone Cables	258,971
Renovate Building 002	132,000
Renovate Range 2 Greenhouse Complex	2,548,561
Repair/Replace Waste Water Treatment Facility	254,627
Dairy Research Facility	1,971,311
BARC-East Waste Water Treatment	5,010,993
TOTAL	12,161,554

Fiscal Year 1993

Range 2 Greenhouse Complex	\$ 7,400,000
BARC-West Waste Water Treatment Plant	4,300,000
BARC-East Water System	600,000
Controlled Environmental Chamber Facility	322,000
New Granary Economic Analysis	30,000
Office/Laboratory Economic Analysis	200,000
Animal Space Economic Analysis	100,000
Contingencies	548,000
Annual Demolition	150,000
Swing Space, Building 048, 049, and 050	350,000
Safety Corrections, Building 050	50,000
Modernization Office Salaries	160,000
BARC-West TSB Storage Low	500,000
Building 162, Modernization	93,000
Remove Dead Trees and Stumps	200,000
Replace Existing Manhole Covers	35,000
Repair and Paint Potable Towers	100,000
Repair Steam Tunnel Pump Station	25,000
Install Vinyl Siding, Building 204B	15,500
Replace Roof, Building 319	20,000
Replace/Resurface Floor, Building 204	60,000
Replace Floor and Paint Building 211	15,000
Replace Roof, Building 203C	167,500
Replace HVAC Chiller, Building 465	45,000
Replace Roof, Building 046 and 047	65,000
Contingencies	325,062
TOTAL	15,876,062

Fiscal Year 1994

Annual Demolition	\$ 150,000
Building 162 Modernization	620,000
Correct Ventilation problem Building 050	500,000
Modernize Building 001	9,700,000
Modernize East Potable Water System	7,400,000
Design New Animal Building	530,000
Upgrade West Electrical System	1,500,000
Design to Modernize Building 004	450,000
Replace Roof Building 203C	167,000
Remove UST's	450,000
Retest UST's	30,000
Modernization Office Salaries	160,000
Replace Existing Manhole Covers	35,000
Contingencies	308,000
TOTAL	\$ 22,000,000

Fiscal Year 1995

Modernize Building 004	\$ 3,960,000
Demolition of Buildings	250,000
Repair Building 162	389,689
Remove Underground Storage Tanks	1,000,000
Repair Bridges	100,000
Resurface Parking Lot Building 012	52,500
Modernize HVAC Building 211	44,000
Replace HVAC Building 318D	40,000
Install New Roof Building 288	41,000
Correct Air Flow Problems Building 007	25,000
Renovate Building 540	54,078
TOTAL	5,956,267

TOTAL FOR FY 1986 THROUGH FY 1995

105,134,500

Proposed Fiscal Year 1996

Construct Controlled Environment Facility	\$ 4,700,000
Design New Beltsville Human Nutrition Research Center (BHNRC)	1,600,000
Design Infrastructure 300 Area	2,000,000
Contingency	1,700,000
TOTAL	10,000,000

Question: Please provide the Committee with the costs and activities for both completed and planned modernization projects at the Plum Island Animal Disease Center.

Answer: The cost and activities for completed and planned modernization projects are as follows:

Plum Island Animal Disease Center (PIADC):

Modernization projects at PIADC are as follows:

Fiscal Year 1992

Consolidation (C)	\$18,400,000
Upgrade HEPA Filters - West Animal Wing (D/C)	<u>2,317,000</u>
	20,717,000

Fiscal Year 1993

Chiller Plant (C)	\$ 1,400,000
Sludge Removal (C)	500,000
Miscellaneous Projects	<u>640,000</u>
	2,540,000

Fiscal Year 1994

Wastewater Treatment Plant (C)	\$ 1,250,000
Miscellaneous Projects	<u>225,000</u>
	1,475,000

Fiscal Year 1995

Above-Ground Fuel Tanks (Phase I) (C)	\$ 1,168,000
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Fiscal Year 1996

Above-Ground Fuel Tanks (Phase 2) (C)	\$ 1,500,000
Wastewater Treatment Plant Closure (C)	2,000,000
Boiler Plant Design	500,000
PCB Transformer Replacement (D/C)	750,000
Miscellaneous Projects	<u>250,000</u>
	5,000,000

Future modernization efforts at PIADC are estimated at \$80 million and will address numerous infrastructure and physical plant repair and improvements.

Question: Please provide obligations and projected funding requirements for major construction and modernization projects currently underway.

Answer: Major construction funding requirements and modernization projects currently underway are as follows:

<u>Modernization Projects</u>	<u>Original Projected Funding Requirements</u>	<u>Obligations</u>
Beltsville, MD	205,000,000	\$66,160,000
Albany, CA	28,000,000	20,000,000
New Orleans, LA	40,800,000	5,952,000
Peoria, IL	78,000,000	5,225,000
Plum Island, NY	90,000,000	5,942,000
Wyndmoor, PA	39,000,000	4,770,000

Gainesville, FL	9,800,000	535,900
Weslaco, TX	17,900,000	667,100
Ames, IA (Modernization)	141,000,000	-
Manhattan, KS	9,200,000	-
East Lansing, MI	16,900,000	462,000

Major Construction Projects

Phoenix, AZ	47,300,000	-
Parlier, CA	27,600,000	1,700,000
Lubbock, TX	13,500,000	2,500,000
Morris, MN	4,400,000	1,125,000
Montpellier, France	3,500,000	500,000
Ft. Pierce, FL	36,370,000	2,150,000
Athens, GA	5,500,000	318,300
Charleston, SC	25,661,000	1,135,000
Ames, IA (Swine Center)	25,900,000	1,461,000
Stuttgart, AR	10,200,000	952,000
Ames, IA (Incinerator/Necropsy)	4,200,000	4,200,000
Corvallis, OR	2,125,000	2,125,000
Madison, WI	323,000	38,000
Yakima, WA	13,000,000	13,000,000

Question: Please provide unobligated balances for each major construction project. By project, what is the planned use for these balances?

Answer: The project listing, represented below, shows all unobligated balances by location which are available for redirection. All other funds available for major construction projects will be required to accomplish the project scope as planned under the applicable construction program authorizations. The Agency intends to utilize the available \$1.5 million for construction contract claims on major construction projects after appropriate notice has been provided to the Congressional Committee on Agriculture.

<u>Location</u>	<u>Balances Available</u> <u>For Redirection</u>
Ames, IA - Nat'l. Soil Center	\$ 10,978
Boston, MA - Nutrition Center	64,222
Lubbock, TX - Plant Stress Lab.	59,557
Lane, OK - Farm Experiment Station	1,152
- Agric. Res. Facility	76,508
Laramie, WY - Animal Disease Center	33,703
Oxford, MS	17,568
Bonneville, AR	2,917
University Park, PA - Agric. Science Facility	37,940
Ft. Collins, CO - Nat'l. Seed Lab.	5
Riverside, CA - Salinity Lab.	1,000,000
Sub-Total	1,304,550
Medford, MA - Res. Tufts Univ.	\$ 34,061
Beckley, WV - Soil Res. Lab.	35,229
Kearneysville, WV - Reg. Crop Lab.	75,637
Lafayette, IN - Lab. Purdue Univ.	15,230
Madison, WI - Reg. Res. Center	2,701
Grand Forks, ND - Human Nutr. Lab.	7,760
Baton Rouge, LA - Soil Res. Fac.	45,006
Lubbock, TX - Plant Stress Center	3,392
Sub-Total	<u>219,016</u>
GRAND TOTAL	\$ 1,523,566

Question: By location, what are your projected repair and maintenance costs for ARS facilities?

Answer: The FY 1995 repair and maintenance budget from annual appropriations authorized by the Fiscal Year 1995 Agricultural Research Service appropriation is \$14,246,700. This budget is

planned to be used for repair and maintenance of ARS facilities as follows:

<u>Location</u>	<u>Obligation</u>
<u>Alabama</u>	
Auburn	\$ 106,000
Total	106,000
<u>California</u>	
Albany	\$ 1,308,000
Shafter	40,000
Total	1,348,000
<u>Delaware</u>	
Newark	\$ 160,000
Total	160,000
<u>Florida</u>	
Brooksville	\$ 170,000
Gainesville	2,550,000
Winter Haven	72,800
Total	2,792,800
<u>Georgia</u>	
Athens	\$ 290,000
Byron	199,000
Dawson	65,000
Watkinsville	112,000
Total	666,000
<u>Illinois</u>	
Peoria	\$ 80,000
Total	80,000
<u>Iowa</u>	
Ames	\$ 735,000
Total	735,000
<u>Kansas</u>	
Manhattan	\$ 110,000
Total	110,000
<u>Louisiana</u>	
Houma	\$ 190,000
Total	190,000
<u>Maryland</u>	
Frederick	\$ 42,000
Total	42,000
<u>Maine</u>	
Orono	\$ 92,000
Total	92,000
<u>Michigan</u>	
East Lansing	\$ 282,000
Total	282,000
<u>Minnesota</u>	
Morris	\$ 70,000
Total	70,000
<u>Mississippi</u>	
Oxford	\$ 302,000
Stoneville	200,000
Total	502,000

<u>Location</u>	<u>Obligation</u>
<u>Nebraska</u>	
Clay Center	\$ 275,000
Total	275,000
<u>New Mexico</u>	
Las Cruces	\$ 75,000
Total	75,000
<u>New York</u>	
Ithaca	\$ 154,000
Plum Island	30,000
Total	184,000
<u>North Carolina</u>	
Raleigh	\$ 30,000
Total	30,000
<u>North Dakota</u>	
Fargo	\$ 50,000
Mandan	224,000
Total	274,000
<u>Ohio</u>	
Coshocton	\$ 48,000
Total	48,000
<u>Oklahoma</u>	
Stillwater	\$ 140,000
Total	140,000
<u>Pennsylvania</u>	
University Park	\$ 12,000
Wyndmoor	4,035,000
Total	4,047,000
<u>South Carolina</u>	
Charleston	\$ 35,000
Total	35,000
<u>South Dakota</u>	
Brookings	\$ 135,000
Total	135,000
<u>Texas</u>	
Bushland	\$ 275,000
College Station	246,500
Temple	45,000
Weslaco	93,500
	660,000
<u>Utah</u>	
Logan	\$ 222,000
Total	222,000
<u>Virgin Islands</u>	
St. Croix	\$ 50,000
Total	50,000
<u>West Virginia</u>	
Beckley	\$ 72,000
Kearneysville	177,000
Total	249,000

<u>Location</u>	<u>Obligation</u>
<u>Wisconsin</u>	
Madison	\$ 40,000
Total	40,000
 SUB TOTAL	 \$13,639,800
Contingency for changes, excessive bids, etc.	<u>606,900</u>
TOTAL	14,246,700

Question: How much did ARS spend in FY 1994 under each of building limitations as cited in the annual Appropriations Act?

Answer: The following obligations were made for repair and maintenance projects at ARS Locations using annual funds authorized by the Fiscal Year 1994 Agricultural Research Service appropriation:

<u>Location</u>	<u>Obligation</u>
<u>Alabama</u>	
Auburn	\$ 63,917
Total	63,917
 <u>Arizona</u>	
Phoenix	\$1,021,796
Tucson	<u>105,415</u>
Total	1,127,211
 <u>California</u>	
Albany	<u>\$6,103,000</u>
Total	6,103,000
 <u>Delaware</u>	
Newark	\$ 43,759
Total	43,759
 <u>District of Columbia</u>	
Washington, DC	<u>\$ 256,346</u>
Total	256,346
 <u>Florida</u>	
Gainesville	\$ 208,966
Total	208,966
 <u>Georgia</u>	
Athens	\$ 136,473
Byron	230,008
Watkinsville	<u>161,390</u>
Total	527,871
 <u>Idaho</u>	
Dubois	\$ 25,419
Total	25,419
 <u>Iowa</u>	
Ames	\$ 918,765
Total	918,765
 <u>Maine</u>	
Orono	<u>\$ 38,316</u>
Total	38,316
 <u>Minnesota</u>	
Morris	<u>\$ 42,023</u>
Total	42,023

<u>Location</u>	<u>Obligation</u>
<u>Mississippi</u>	
Mississippi State	\$ 10,028
Oxford	42,282
Stoneville	<u>357,120</u>
Total	409,430
<u>Montana</u>	
Miles City	\$ <u>25,000</u>
Total	25,000
<u>Nevada</u>	
Reno	\$ <u>78,410</u>
Total	78,410
<u>New York</u>	
Geneva	\$ 48,638
Plum Island	<u>461,292</u>
Total	509,930
<u>New Mexico</u>	
Las Cruces	\$ <u>55,000</u>
Total	55,000
<u>North Dakota</u>	
Fargo	\$ 79,545
Mandan	<u>901,317</u>
Total	980,862
<u>Oklahoma</u>	
El Reno	\$ 46,000
Stillwater	131,414
Woodward	<u>30,000</u>
Total	\$ 207,414
<u>Oregon</u>	
Pendleton	\$ <u>24,940</u>
Total	24,940
<u>Pennsylvania</u>	
University Park	\$ 116,469
Wyndmoor	<u>1,110,951</u>
Total	1,227,420
<u>Puerto Rico</u>	
Mayaguez	\$ <u>181,274</u>
Total	181,274
<u>South Carolina</u>	
Charleston	\$ <u>102,747</u>
Total	102,747
<u>Texas</u>	
Beaumont	\$ 20,000
Bushland	261,303
College Station	97,214
Kerrville	12,000
Lubbock	62,095
Temple	<u>99,419</u>
Total	552,031
<u>Utah</u>	
Logan	\$ <u>197,101</u>
Total	197,101

<u>Location</u>	<u>Obligation</u>
<u>West Virginia</u>	
Beckley	\$ 34,042
Kearneysville	<u>201,347</u>
Total	235,389
<u>Wisconsin</u>	
Madison	\$ <u>4,150</u>
Total	4,150
Repair and Maintenance Total	\$14,146,691

No obligations were made by ARS in FY 1994 under the following building program limitations as cited in the annual Appropriations Act, namely the unlimited buildings, headhouse/greenhouse, ten small buildings, and ten percent alteration construction program authorizations.

Question: Please list the funds expended, by location, for hazardous waste projects for fiscal years 1990-1994. Briefly describe the activities involved.

Answer: The funds expended by location for hazardous waste projects for fiscal years 1990-1994 will be provided for the record.

FY 1990-1994 Hazardous Waste Projects

	FY90	FY91	FY92	FY93	FY94
	(\$'s	In	Thousands)		
Auburn, AL (UST's)	0.0	27.5	23.6	0.0	0.0
Booneville, AP (UST's, septic)	10.7	0.0	0.0	0.0	0.0
Albany, CA (asbestos, UST's)	319.3	159.9	49.2	0.0	0.0
Davis, CA (FA)	123.3	0.0	0.0	0.0	0.0
Fresno, CA (UST, drywell FA)	143.2	26.0	0.0	0.0	0.0
Salinas, CA (UST's)	0.0	2.6	0.0	0.0	0.0
Shafter, CA (FA/SI)	128.8	93.0	25.0	0.0	0.0
Akron, CO (UST's)	20.8	23.0	0.0	0.0	0.0
Fort Collins, CO (landfill)	0.0	23.8	25.3	0.0	0.0
USNA, Washington, DC (UST's)	0.0	334.2	40.0	98.8	0.0
Georgetown, DE (UST's)	0.0	97.3	0.0	0.0	0.0
Gainesville, FL (asbestos)	32.0	0.0	0.0	0.0	0.0
Miami, FL (UST's)	0.0	54.8	14.2	0.0	0.0
Athens, GA (asbestos, FA)	95.0	0.0	20.1	77.2	0.0
Byron, GA (UST's, asbestos)	13.6	34.5	0.0	0.0	0.0
Tifton, GA (UST's)	0.0	66.8	0.0	0.0	0.0
Savannah, GA (UST's)	0.0	0.0	0.0	0.0	16.0
Watkinsville, GA (UST's)	0.0	0.0	20.4	0.0	0.0
Ames, IA (radwaste landfill)	38.6	0.0	0.0	0.0	0.0
Boise, ID (UST's)	0.0	8.0	0.0	0.0	0.0
Dubois, ID (UST's)	6.6	0.0	0.0	0.0	0.0
Kimberly, ID (septic, SI)	12.0	0.7	4.4	0.0	0.0
Peoria, IL (UST's, PCB's, asbestos)	515.9	159.4	49.7	0.0	0.0
Urbana, IL (UST's)	0.0	25.0	0.0	0.0	0.0
Manhattan, KS (UST's)	0.0	19.7	0.0	0.0	0.0
Houma, LA (asbestos, sampling)	68.7	37.4	0.0	0.0	0.0
New Orleans, LA (asbestos, PCB)	150.0	0.0	516.6	0.0	0.0
BARC, MD (UST, FA/SI/PA)	550.7	567.2	6502.5	1297.2	438.8
Orono, ME (UST)	20.8	5.2	0.0	0.0	0.0
East Lansing, MI (UST's, FA/SI)	10.7	119.2	30.0	0.0	0.0
Morris, MN (UST's)	0.0	60.1	0.0	0.0	0.0
Stonesville, MS (UST's)	46.4	0.0	0.0	32.8	0.0
Miles City, MT (UST's, landfill)	61.0	80.1	12.6	0.0	0.0
Sidney, MT (UST's)	0.0	1.6	0.0	0.0	0.0
Fargo, ND (asbestos, RA)	50.0	55.0	0.0	0.0	0.0
Mandan, ND (landfill, septic)	28.3	47.6	2.2	0.0	0.0
Clay Center, NE (UST's, FA/SI)	11.9	157.1	26.6	0.0	28.2
Las Cruces, NM (UST, pesticide spill)	7.4	4.5	0.0	0.0	0.0
Greenport, NY (asbestos, tanks)	29.4	0.0	0.0	0.0	420.5
Ithaca, NY (asbestos)	72.3	0.0	0.0	0.0	0.0
Coshocton, OH (UST's)	0.0	11.0	304.0	0.0	0.0
Delaware, OH (radwaste landfill)	12.7	36.5	0.0	52.0	0.0
El Reno, OK (UST, surface impoundment)	39.9	0.6	0.0	0.0	0.0
Stillwater, OK (surface impoundment)	9.2	3.4	0.0	0.0	0.0
Woodward, OK (FA/SI)	8.9	0.6	25.6	0.0	0.0
Corvallis, OR (UST's)	8.0	0.0	0.0	0.0	0.0
University Park, PA (asbestos, UST's)	17.9	0.0	0.0	49.4	0.0
Wyndmoor, PA (asbestos, UST's)	322.7	298.2	228.4	0.0	0.0
Mayaguez, PR (UST's)	0.0	34.1	184.2	98.2	0.0
Charleston, SC (UST's)	268.7	50.0	134.6	65.0	43.5

Brookings, SD (UST's)	0.0	25.3	1.3	0.0	0.0
Lewisburg, TN (UST's)	10.5	0.0	0.0	0.0	0.0
Brownsville, TX (FA/SI/PA)	5.5	4.4	0.0	820.7	461.7
Brownwood, TX (UST's)	0.0	2.7	0.0	0.0	0.0
Bushland, TX (surface impoundment)	2.2	0.7	39.3	0.0	0.0
College Station, TX (UST's)	0.0	5.0	0.0	0.0	0.0
Kerrville, TX (surface impoundment)	8.4	0.0	0.0	0.0	0.0
Lubbock, TX (UST's)	0.0	0.0	21.9	0.0	0.0
Temple, TX (asbestos, UST's)	4.6	9.2	40.4	0.0	0.0
Weslaco, TX (asbestos, UST, FA/SI/PA)	178.0	28.8	4.5	273.6	45.8
Frosser, WA (UST's)	10.0	0.0	0.0	0.0	0.0
Fullman, WA (UST's)	0.0	39.3	0.0	0.0	0.0
Yakima, WA (septic)	336.3	17.2	50.1	0.0	0.0
Madison, WI (UST's)	0.0	0.0	101.0	0.0	0.0
Kearneysville, WV (FCB)	0.0	0.1	0.0	0.0	0.0
Beckley, WV (FA)	0.0	30.1	0.0	0.0	0.0
Cheyenne, WY (UST, landfill, septic)	32.2	43.5	0.0	0.0	0.0

TOTAL 3,851.5 2,222.6 8,498.4 2,864.9 1,455.2

Abbreviations:

UST Underground Storage Tanks
FA Preliminary Assessment
SI Site Investigation

Question: What are your known cost projections for hazardous waste projects by location?

Answer: The following are the cost projections for hazardous waste projects by location.

Hazardous Waste					
	FY96	FY97	FY98	FY99	FY00
	(\$'s In Thousands)				
Delaware, OH (Radiation Burial Site)	0.0	500.0	0.0	0.0	0.0
Beltsville, MD (FI/FA, UST's)	3300.0	2970.0	4170.0	5870.0	1350.0
Peoria, IL (UST's)	75.0	240.0	200.0	0.0	0.0
East Lansing, MI (SI/FI)	0.0	1000.0	0.0	0.0	0.0
Greenport, NY (FI/FA, RCRA Closure)	1100.0	4000.0	2500.0	1500.0	1000.0
Clay Center, NE (RCRA Closure)	0.0	0.0	400.0	0.0	0.0
Shafter, CA (FI/FA)	50.0	2000.0	5600.0	0.0	0.0
El Paso, OK (SI)	15.0	0.0	0.0	0.0	0.0
Weslaco, TX (SI)	100.0	0.0	0.0	0.0	0.0
TOTAL	4640.0	10710.0	12970.0	7370.0	2350.0

Abbreviations:

UST Underground Storage Tanks PA Removal/Remedial Action
SI Site Investigation FI Remedial Investigation
RCRA Resource Conservation and Recovery Act

SUSTAINABLE AGRICULTURE

Question: Explain your program on sustainable agriculture to the Committee. Does ARS and CSREES agree on a common understanding and definition of this program? What is the funding allocated to this program by ARS and CSREES?

Answer: Both ARS and CSREES subscribe to the definition of sustainable agriculture as defined in the 1990 Farm Bill. In accordance with this definition, ARS research on sustainable agriculture encompasses approximately 370 projects that contribute to a significant degree to sustainability. The criteria ARS uses for determining whether a project contributes to sustainable agriculture were developed by a task force jointly empowered by (then) CSRS and ARS. They include seven criteria: integrated system of plant and animal production practices; satisfies human food and fiber needs; enhances environmental quality; natural resource conservation and enhancement; biological resource utilization; economic viability; and quality of life. ARS requires each project leader to apply these criteria in

determining whether a project should be classified as "contributing to sustainable agriculture".

CSREES has a focused effort in sustainable agriculture through funding for the Sustainable Agriculture Research and Education (SARE) program and the Sustainable Agriculture Technology Development and Training Program (SATDTP). Both programs award competitive grants through a regional structure, with recommendations on funding made by regional councils. These councils include scientists, producers, non-profit and agribusiness representatives, and agency staff. The SARE program primarily funds research projects, most of which include an outreach component. Part of the SARE program funding is used to match funds from the Environmental Protection Agency for the Agriculture in Concert with the Environment (ACE) program. ACE research and education funds are also competitively awarded through regional councils. The SATDTP effort is the newest program, and is providing support for Extension workshops, videos, curricular materials, and strategic planning activities.

The funding for sustainable agriculture allocated in 1995 is \$184,165,000 for ARS, and \$127,047,000 for CSREES.

MANAGEMENT SYSTEM EVALUATION AREAS (MSEAS)

Question: What support is USDA currently providing to Management System Evaluation Areas (MSEA)? Please provide us with a description of the projects being supported, including the total amount of funding available for each.

Answer: Each of the MSEA locations listed below has a parallel program of comparing typical farming systems with alternate systems, to evaluate the effect of these changes in farming practices on water quality and on economic viability. The Soil Tilth Laboratory in Ames, in addition, has responsibility for establishing uniform and sound sample collection and storage procedures and for analyzing the samples.

In FY 1995, USDA support for the MSEA projects is as follows:

	<u>ARS</u>	<u>CSREES</u>
Ames, Iowa	\$1,693,300	\$300,000
St. Paul, Minnesota	611,100	300,000
Columbia, Missouri	411,100	300,000
Lincoln, Nebraska	650,000	300,000
Columbus, Ohio	355,600	300,000

There is a great interest from producers and agencies in my state in the Mississippi Delta MSEA Project. I understand that this project has received federal funding support from the Agricultural Research Service and other federal agencies but that support is also required from the Cooperative States Research, Education, and Extension Service.

Question: What level of support is being provided by ARS for this project? What additional support is planned for fiscal year 1996?

Answer: ARS provided \$225,000 in FY 1995 to help initiate the Mississippi Delta MSEA project. ARS is currently planning to provide the same amount in FY 1996 to continue the project.

Question: Will funding support for this project be available from the Cooperative State Research, Education, and Extension Service for 1996?

Answer: Research proposals for 1995 Special Grant Funds in Water Quality are not due until the end of April. Peer review and award of funds will not be completed until July 1995. The funds to be appropriated for 1996 are not known at present. No definitive statement can be made at this time regarding the Cooperative State Research, Education, and Extension Service funding of the Mississippi Delta MSEA Project for fiscal year 1996.

1890 PROGRAMS

You indicate in your testimony that seven centers of excellence have been established at the 1890 institutions to address specific USDA agency priorities and that three additional centers are proposed to be established in 1996.

Question: Where are each of the seven centers established to date located?

Answer: The seven established centers are located at the following 1890 Universities:

Alabama A&M University
Tennessee State University
University of Arkansas-Pine Bluff (2)
Lincoln University
Prairie View A&M University
University of MD-Eastern Shore

Question: Where will the three new centers be located?

Answer: The three proposed new centers will be located at the following 1890 Universities:

Virginia State University
Delaware State University
Alcorn State University

Question: What process is being used to determine which of the 1890 institutions will house the centers proposed?

Answer: The proposed centers are matched with the critical and or priority needs of the collaborating USDA agency and the 1890 University which shares the same priority. Matches are often based on expansion of existing cooperative research programs and the institutions strength.

Question: What is the purpose of each of the seven existing centers and what priorities will be addressed by each of the three new centers? How is this being determined?

Answer: The purpose and priorities of the seven existing centers are:

Alabama A&M - Forest Resource Management (FS)
Tennessee State University - Landscape Horticulture &
University of Arkansas/Pine Bluff - Aquaculture/Fisheries
Research, (ARS)
University of Arkansas/Pine Bluff - Regulatory/Inspection
Service, (APHIS)
University of MD/Eastern Shore - Food Safety and Poultry,
(ARS, FSIS, APHIS)
Prairie View A&M University - World Food Distribution,
(AMS, CFSA, FAS, FCS, ERS)
Lincoln University - Wildlife and Geographic Information
Systems, (APHIS, NRCS, CFSA, FS)

The priorities of the new centers were determined by both the agencies and the University. Through joint collaboration, both are seeking opportunities for mutually beneficial joint programs to solve agricultural and consumer problems. These three new programs are:

Virginia State University - Water Quality Improvement
(NRCS)
Delaware State University - Aquaculture and Food Safety
(ARS)
Alcorn State University - Hog Production and Marketing
(ARS, RB & CDS)

Question: What is the total amount of USDA funding now allocated for each center of excellence?

Answer: The total amount of USDA funding now allocated for each center of excellence is as follows:

Tennessee State University	\$500,000
Alabama A&M University	2,172,000
University of Arkansas, Pine Bluff (Aquaculture)	186,000

University of Arkansas, Pine Bluff (Regulatory Science)	200,000
University of MD, Eastern Shore	750,000
Lincoln University	625,000
Prairie View University	<u>310,000</u>
Total	4,743,000

Question: What additional funding is requested for each existing center and for each new center for fiscal year 1996?

Answer: Additional funding for each existing center and for each new center is as follows:

		Contributing Agency
University of MD, Eastern Shore	\$ 50,000	APHIS
Prairie View University	740,000	AMS
Alcorn State University (New)	400,000	ARS, RB & CDS
Delaware State University (New)	250,000	ARS
Virginia State University (New)	<u>460,000</u>	NRCS
Total Additional Funds	1,900,000	

With a reduction of \$25,000 at Lincoln University, total additional funding requested is \$1,875,000.

BUDGET REQUEST

Question: Please provide for the record both ARS' and CSREES' budget requests submitted to the Department and the Department's request for ARS and CSREES submitted to the Office of Management and Budget.

Answer: The ARS Budget recommendations as they progressed through the budget process will be provided for the record.

FISCAL YEAR 1996 APPROPRIATION HISTORY

Item	Agency Estimate	Department Estimate	President's Budget
PROGRAM INCREASES			
Food Safety	\$10,000,000	\$7,500,000	\$7,500,000
Integrated Pest Management	15,000,000	5,000,000	5,000,000
Human Nutrition	12,500,000	2,000,000	2,000,000
Agricultural Biodiversity	7,000,000	1,000,000	1,000,000
Environmental Quality	20,500,000	1,000,000	1,000,000
Trade Enhancement	9,250,000	-	-
Rural Development	3,750,000	200,000	200,000
Federal Energy Efficiency/Management	750,000	-	-
Nat'l. Storage and Preservation	500,000	500,000	500,000
Electronic Info. Initiative	<u>500,000</u>	<u>262,000</u>	<u>262,000</u>
Subtotal, Program Increases	86,750,000	25,162,000	25,162,000
OTHER INCREASES			
Pay Costs	9,091,000	9,091,000	9,091,000
Operating Costs	<u>10,748,000</u>	<u>10,748,000</u>	<u>10,748,000</u>
Subtotal, Other Increases	19,839,000	19,839,000	19,839,000
DECREASES			
Leflar School of Law Library	(462,000)	(462,000)	(462,000)
FTS 2090	-	-	(255,000)
Staff-Year Reductions	-	(10,387,000)	(10,387,000)
Administrative Overhead	-	(7,316,000)	(7,316,000)
Base Program Reductions	-	-	(19,250,000)
Location Closures	-	-	<u>(2,583,000)</u>
Subtotal, Decreases	(462,000)	(18,165,000)	(47,253,000)
TOTAL	106,127,000	26,836,000	(2,252,000)

Buildings and Facilities

Beltsville Agricultural Research Center, Beltsville, MD (Modernization)	20,000,000	10,000,000	10,000,000
AFS Regional Research Centers:			
Philadelphia, PA	4,500,000	- -	- -
New Orleans, LA	900,000	900,000	900,000
Peoria, IL (Modernization)	<u>11,700,000</u>	<u>11,700,000</u>	<u>11,700,000</u>
Flum Island Animal Disease Center, Greenport, NY (Modernization)	17,100,000	12,600,000	12,600,000
European Biological Control Laboratory, Montpellier, France (Construction)	10,000,000	5,000,000	5,000,000
U.S. Horticultural Crops and Water Management Research Laboratory, Earlier, CA (Construction)	- -	2,600,00	2,600,000
National Rice Germplasm Evaluation and Enhancement Center, Stuttgart, AR (Construction)	24,400,000	- -	- -
National Swine Research Center, Ames, IA (Construction)	6,500,000	- -	- -
Avian Disease and Oncology Laboratory, East Lansing, MI (Design and Construction)	5,150,000	- -	- -
Plant Stress and Water Conservation Laboratory, Lubbock, TX (Construction)	10,600,000	- -	- -
Horticultural Research Laboratory, Ft. Pierce, FL (Construction)	33,000,000	- -	- -
Entomological Laboratories Gainesville, FL (Modernization)	5,700,000	- -	- -
Fearing and Genetics Laboratory, Waimanalo, HI Tropical Fruit and Vegetable Laboratory, Hilo, HI (Design)	2,400,000	- -	- -
Subtropical Agricultural Research Laboratory, Weslaco, TX (Modernization)	4,800,000	- -	- -
Maricopa Agricultural Center Maricopa, AZ (Design)	5,300,000	- -	- -
U.S. Vegetable Laboratory Charleston, SC (Construction)	17,620,000	- -	- -
Plant Physiology and Genetics Research Laboratory Urbana, IL (Modernization)	1,600,000	- -	- -
U.S. Grain Marketing and Research Laboratory Manhattan, KS (Modernization)	1,600,000	- -	- -
Sugarbeet, Bean and Cereal Research Laboratory East Lansing, MI (Modernization)	<u>720,000</u>	- -	- -
TOTAL	173,060,000	30,200,000	30,200,000

QUESTIONS SUBMITTED BY SENATOR BURNS

American agriculture on the plains is beginning to show the effects of the neglect that has been the Agriculture Research Service. Yields are beginning to drop due to disease, pest infestation and noxious weeds. The proposed budget shows cuts in research funding and the elimination of some research stations altogether.

Question: When you developed your budget proposal did you include the Sidney Agriculture Research Center?

Answer: In the formative budget development stages, ARS did not originally recommend to the Department the closure of Sidney or any other facility. However, as the budget process evolved and the generally flat budget allowances became known, ARS identified selected location closures which included Sidney as part of overall funding reductions in order to fund priority research needs in the area of food safety and pathogen reduction, integrated pest management, human nutrition, agricultural biodiversity, and dust pollution.

Question: What guidelines has the administration established for the selection process of the stations that they propose to close?

Answer: The criteria and factors considered to identify the locations proposed for closure include: physical condition of the facilities; critical mass of scientific talent; support for USDA Action Agencies; relevance to national priorities; similar programs at other locations; response to research needs of a broad array of customers and users; and orientation to national problems versus State/Local problems.

Dr. Plowman, recently I have heard very serious concerns raised by California citrus growers regarding Citrus Tristeza Virus and its impact on the California citrus industry.

As you are aware, California is the only repository for pathogen free root stock in the world and is the only source of a \$500 million annual table quality export market for citrus. I am told that Tristeza, if left unchecked, will destroy California's citrus industry. It is my understanding that an international panel of scientists met recently to determine whether or not the current suppression program is working and, in fact, came to the conclusion that it is not.

Question: In light of this finding, what do we in the Congress and you at the ARS need to do to protect this valuable resource?

Answer: Although serious losses are anticipated should CTV become widespread in California, it is unlikely that the citrus industry would be destroyed. Active disease management would be required, similar to the programs in Florida and other areas where CTV is endemic. The current suppression program in California is an eradication attempt by removal of infected trees. The effectiveness of this approach is unknown. However, in the panel's opinion, the current rate of tree removal may be too slow to prevent the spread of CTV. The panel recommended that significantly more infected trees be removed in the next three years to improve the chances for CTV eradication in California. If the California program is ultimately unsuccessful in achieving full eradication, the disease control strategy in California would need to turn to citrus grove management in order to maintain the disease losses to economically acceptable levels.

Question: Is there money in the current ARS budget for research in this area?

Answer: ARS conducts research on CTV in Orlando, FL (\$530,200, 1.6 SY). Results from this program and technical assistance are transferable to the California problem.

QUESTION SUBMITTED BY SENATOR BUMPERS

ARKANSAS CHILDRENS HOSPITAL NUTRITION CENTER

Question: ARS currently has a number of Human Nutrition Research Centers which, I understand, work in various areas of nutrition research and the linkage of nutrition to human health and specific subpopulations. I noted in the past that there was a gap in nutrition research in the area of rural populations. To help fill that gap, I worked to help establish a human nutrition research center based out of the Arkansas Children's Hospital. Can you provide your views on the need for this research and what ARS is doing to support it?

Answer: Congressional establishment of the Lower Delta Nutrition Intervention Research Initiative in FY 1995 was indeed a most important step forward in addressing critical issues relevant to nutrition and health. The last decade has seen a major growth in knowledge of the functional consequences of moderate degrees of malnutrition and chronically poor dietary quality. Under-nutrition is now understood to have serious functional consequences for health, cognitive development and reproductive performance. Several nutrition-related chronic diseases are accepted as related both to specific dietary patterns and to obesity, an adverse health status in which poverty becomes an amplifying factor. These nutritional characteristics and consequences are also recognized as descriptive of rural populations, particularly those in the Lower Mississippi Delta.

The partnership of the six institutions in Mississippi, Louisiana, and Arkansas with ARS and its intramural nutrition research provides an opportunity for rigorous research into the feasibility and impact of multifaceted community-based nutrition intervention, which never before has been tested. The Arkansas Children's Hospital is one of the seven partners in this initiative and their community pediatric programs will materially contribute to the intervention design focused on improvement of nutritional status and dietary quality, and effective mitigation of some of the real health problems in these communities.

Development of a strong human nutrition component in the program of the Arkansas Children's Hospital Research Institute will provide added opportunity to address issues important to the health and well-being of rural communities. In FY 1995, ARS funded a cooperative agreement with the Research Institute at \$970,588 million to characterize the relationship between diet and cognitive ability in children at different stages of growth. This research is highly complimentary to the Lower Delta Nutrition Intervention Research Initiative.

QUESTIONS SUBMITTED BY SENATOR HARKIN

1. The Committee has made its intention clear that research and extension activities should foster family farming, reiterating that point in last year's report:

The Committee expects the Department to ensure that its research and extension activities advance each of the purposes outlined in section 1602 of the 1990 farm bill. The Committee expects the Department, in seeking to advance the goal of providing economic opportunities in rural America, to promote the objective of increasing self employment opportunities in family farming and rural communities.

Question: (a) What has been done to date to implement the national research and extension purposes?

Answer: ARS published in April 1993 an addendum to its Six-year Implementation Plan outlining the Agency policies regarding the national research and extension purposes described in the 1990 Food Security Act. This policy requires that every research project address at least one or more of the six purposes. This requirement has been met. As existing projects terminate and new ones are developed, attention to the purposes is an essential requirement of the research project planning process.

Question: (b) What is the current status of developing guidelines to implement the purposes?

Answer: ARS initially considered the publication of the addendum to the Six-Year Program Plan to satisfy the requirement that guidelines be issued. Subsequently, ARS learned that Congress expected more detailed procedures to be published. Currently, ARS has an activity underway to develop a new process for project planning and evaluation. The Farm Bill purposes, provisions of the Government Performance and Results Act, and customer service standards are critical components of the new process under development. Key features to be included in the new process will be definition of the program goals, or purposes, strategic plans in the form of research outcomes, and performance measures.

Question: (c) Has the goal of promoting family farming and rural community economic opportunities been fully incorporated into priority setting and program evaluation?

Answer: Yes, one of the Farm Bill purposes which ARS addresses is related to the broad area of rural development. Many of the social and economic issues associated with family farms and rural communities are not amenable to technology solutions, but to the extent they are, ARS considers this area of work to be an emphasis area for research planning and budget development. ARS considers most of its research programs to improve agricultural production efficiency to benefit all producers regardless of the size of the producing unit. By reducing costs and improving the economic return of all producers, this contributes to the economic health of rural communities. ARS also has strong programs and an outstanding record of success to transfer new knowledge and technologies to the private sector for commercial development and for the establishment of new business and jobs in rural communities.

2. I continue to be interested and concerned about the degree of coordination among the USDA research and extension programs in sustainable agriculture, integrated pest management, water quality and related areas. There are clearly important interactions among

these programs, and I am concerned that the programs too often appear to operate separately. If that is the case, we lose out on gains and efficiencies that could result from better integration and coordination. Last year's Committee report addresses this issue:

The Committee encourages the Department to improve coordination and integration of research and extension programs in sustainable agriculture, integrated pest management, and water quality on a national and regional basis. Whenever possible, these programs should encourage public-private partnerships, farmer involvement, and multi-state and regional projects.

The budget request proposes increases in integrated pest management programs, but without indicating how the Department intends to follow the Committee's recommendation to work on these issues in the larger context of sustainable agriculture and the integrated farming systems research and extension.

Farmers, of course, must integrate practices at the farm level, whether they might be drawn from IPM, or water quality, or the sustainable agriculture research program, or another source.

Question: (a) Could we not better help the farmer by bringing our research and education programs together, clearly focused on an integrated systems approach?

Answer: We support an integrated systems approach to research planning and coordination for the many reasons you cite. ARS has for several years been integrating IPM, Water Quality, Sustainable Agriculture, Erosion Control and other considerations in several research programs addressing integrated farming systems. As another aspect of its' integrated approach, ARS is developing computerized decision support systems that will help farmers choose from among a variety of alternatives concerning such issues as pest control, crop nutrient applications, and enterprise thrusts. We are also adding to the development of supporting databases.

Question: (b) What have you done to implement last year's report language? What can we expect to result from any such efforts?

Answer: ARS, in cooperation with other agencies and organizations, including CSREES, NRCS, ERS, EPA, USGS, and the Land Grant Universities, continues to conduct integrated systems research for water quality and cropping systems in the midwest. The Management Systems Evaluation Area (MSEA) project initiated in 1990 has on-farm research sites in Ohio, Iowa, Minnesota, Missouri, and Nebraska. ARS also has initiated other approaches to integrated systems research in Arizona, Colorado, Maryland, Minnesota, and Washington related to sustainable agriculture, erosion control, and other agroecosystem concerns. Farmers are integral participants in these projects, including assistance with project design and cooperation in program implementation and evaluation. In addition to the development of improved agricultural production practices and technologies that are effective, cost efficient, and environmentally acceptable, the systems research approach involving multi-agency coordination will result in more effective targeting and utilization of public resources that support the programs of research and education agencies.

QUESTIONS SUBMITTED BY SENATOR JOHNSTON

AGRICULTURE RESEARCH SERVICE (ARS) SUGARCANE RESEARCH UNIT,
HOUMA, LOUISIANA

The Administration's proposed FY 1995 and 1996 budgets recommended closing the USDA/ARS Sugarcane Research Unit in Houma, La. Research conducted at this facility has been criticized for exclusively benefiting the Louisiana sugarcane industry. Last year, I and other members of the Louisiana Delegation and our constituents in South Louisiana strongly opposed this viewpoint and

the closure of this facility based on the overall importance of the Houma facility to Louisiana and the nation. The following examples represent only some of the important research efforts at the Houma facility.

- Houma has the only USDA/ARS geneticist/cytologist working in sugarcane cytology. A special laboratory has been assembled at the Houma facility to study chromosomal behavior in sugarcane breeding which is important in developing varieties for all domestic sugarcane producing areas. This work has led to cooperative efforts with scientists from across the country to utilize new biotechnology methods to induce genetic change, identify transferred genes in hybrid plants, and identify sugarcane diseases through molecular procedures.
- Houma has the only USDA/ARS entomologist working primarily on developing plant resistance to both sugarcane and Mexican rice Borers (pests). This research has led to improved Integrated Pest Management control tactics involving biological control, natural predators, and resistant varieties that has reduced substantially the need for insecticides in Louisiana.
- Houma has the only USDA/ARS weed control scientists involved in research which is applicable to all of the domestic sugarcane producing areas. Their work has been focused on integrating the use of pest tolerant varieties, biological control agents, cane-trash mulches, cultural practices and the use of environmentally safe pesticides. This research will hopefully allow the sustainable production of sugarcane and ultimately reduce pesticide loading on the environment.

As a result of efforts by the Louisiana delegation and other members of Congress, funding to maintain ongoing research at Houma and several other ARS research facilities was maintained for one year in P.L. 103-330. Also, ARS was directed to further evaluate the research efforts at these facilities zeroed out in the President's FY 1995 Budget.

Question: Did ARS re-evaluate research activities at the Houma ARS facility?

Answer: Following instructions from Congress to evaluate, during the 1995 year, each of the nine locations saved from closure during the FY 1995 budget deliberations, ARS initiated the evaluation process in November 1994. However, given the FY 1996 budget proposal which call once again for closure of the nine locations, plus three others the requested reevaluations have been placed on hold pending the outcome of the 1996 Appropriation Act. ARS did begin one onsite evaluation at the Sidney, Montana, location. The evaluation completed at Sidney, Montana entailed an onsite review that included ARS program and budget officials, Sidney scientists and other staff, ranchers and other users, and university and other cooperators. Project reports were delivered by each scientist on their research objectives, accomplishments, and future plans. Program needs and research objectives, accomplishments, and future plans. Program needs and research priorities were discussed by users and cooperators. However, the ARS did not go further with this review and reconsider the rationale for the recommendation to close the facility.

Question: Did ARS recommend closure of the Houma facility in the FY 1996 Budget or was this someone else's decision? What was this decision based on?

Answer: The closure recommendation was not included in ARS' initial budget plan. The criteria and factors considered to identify the locations proposed for closure include: physical condition of facilities; critical mass of scientific talent; support for USDA Action Agencies; relevance to national priorities; similar programs at other locations; response to research needs of a broad array of customers and users; and orientation to national problems versus State/Local problems. As the budget development

process moved through multiple review and revision steps--and as total funding allowances and new program initiatives became known--ARS, the Department, and OMB collectively supported the closure recommendation.

Question: If Congress directed ARS to continue the current critical resources on sugarcane research could some of this work be done at the ARS Southern Regional Research Center (SRRC) in New Orleans?

Answer: The laboratory-oriented research at Houma could be carried out at the Southern Regional Research Center (SRRC) at New Orleans, Louisiana.

Question: As another option, I understand that ARS has "worksites" in support of recognized research locations. Could not Houma be a satellite or worksite to programs carried out at SRRC, if the core programs related to sugarcane were transferred to that Center?

Answer: Most of the Houma research is field-oriented; these activities could not be carried out very effectively or efficiently at the SRRC. If certain core sugarcane research activities were to be located at the SRRC, the field evaluation aspects of that research could be conducted at a Houma worksite or satellite location.

Question: Please provide a description of the research program carried out at the Houma facility.

Answer: Research at Houma is exclusively on the breeding and culture of sugarcane. Emphasis is on the development of new improved varieties, the use of genetic engineering procedures to introduce new genes or genetic material into existing varieties, control of weed populations, and improved methods of insect and disease control.

Question: What environmental studies must be completed before ARS facilities zeroed out in the President's FY 1996 budget are closed?

Answer: Before the ARS property can be disposed, a comprehensive Environmental Site Assessment (ESA) must be conducted in accordance with Sections 101 (35), 107, and 120 (h) of the Comprehensive Environmental Response, Compensation, and Liability Act and Federal Property Management Regulations 41 CFR 101-47.202-2 (b) (9) and (10), using American Society for Testing and Materials (ASTM) Standard Guidance for Site Assessments. The ESA is composed of two parts. Phase I involves a comprehensive records search, site visit, and interviews with employees. If Phase I indicates a Recognized Environmental Condition (ASTM reference), Phase II, sampling/analysis, is required to determine if there is contamination. The Phase II sampling will also determine the extent of any remedial action.

Question: How much do such studies cost? What would be the estimated cost of such studies at Houma? When will any required studies be completed?

Answer: The cost of Phase I of the ESA varies depending upon the size of the facility. The average cost is \$5,000. Phase II costs vary widely and are dependent upon the findings of Phase I. The average cost has been approximately \$25,000.

It is estimated that the cost of both Phase I and Phase II at the Houma location will be \$25,000. A Phase II is anticipated because sampling will be required to investigate areas of research activity involving the use of lead compounds and lead subacetate. In addition, an area reportedly used for chemical disposal will require investigation to ensure that previous remedial efforts at the site have been adequate.

Assuming that the ESA's will begin in the first quarter of FY 1996, it is anticipated that the ESA's will be completed at all locations by the fourth quarter of FY 1996. If the results of the ESA determine that remediation is required, disposal of the property could be delayed until funding is obtained, a contract awarded, and the remediation completed. This usually takes 1 to 2 years, but it could take longer depending on the extent and/or nature of the contamination.

COST/IMPACT OF CLOSING ARS RESEARCH FACILITIES

Question: What other costs will there be to close the Houma station?

Answer: The following represents the projected costs by type to close Houma other than environmental studies costs.

Personnel (Relocation, lump sum payments and severance pay)	\$911,000
Outplacement and other travel	12,000
Appeals	14,000
Operating costs (utilities, etc.)	85,000
Securing Buildings, etc.	139,000
Boundary Survey/Description	5,000
Miscellaneous	1,000
Total	1,167,000

Question: How do the recommended ARS facility closures influence National Research Objectives for affected commodities at national and international levels?

Answer: Recommended ARS facility closures will have minimal influence on broad national research objectives. The broad national research objectives for affected commodities will be addressed by scientists at remaining ARS locations.

Question: How will the missions of the research programs eliminated in the President's budget be addressed in their absence?

Answer: The missions of the research programs eliminated in the President's proposed budget will be addressed by scientists at other ARS locations to the extent possible within available resources, and environmental conditions permitting.

Question: With the recommended closures of several ARS facilities, what is the expected impact on determining long-term solutions for priority research being conducted at these facilities?

Answer: To the extent possible, many high priority concerns being addressed at the locations scheduled for closure will be addressed at other ARS locations.

Question: Please provide for the record a brief statement of the important accomplishments for each of the ARS facilities which are scheduled for closure in the President's FY 1996 Budget.

Answer: Accomplishments for each of the ARS facilities scheduled for closure in the President's FY 1996 Budget are as follows:

Chatsworth, New Jersey - The highly-focused research conducted at the Blueberry and Cranberry Research Center in Chatsworth, New Jersey, has led to several improvements in blueberry and cranberry production. The blueberry breeding program coordinates nationally with cooperators in Oregon, Michigan, New Jersey, North Carolina, Mississippi, Georgia, Florida, Texas, Arkansas, and Maryland. In the past 25 years, the breeding program at the Chatsworth location released 18 highbush and seven rabbiteye blueberry cultivars. Currently, over 80 percent of highbush blueberry acreage in the U.S. and Canada is planted with varieties developed at Chatsworth.

Clemson, South Carolina - Researchers at the Cotton Quality Laboratory in Clemson, South Carolina, developed instrument systems that precisely and objectively measured cotton quality. The success of these systems led the cotton industry to an instrument-based system for marketing and utilization. As a result, according to the National Cotton Council, the reputation of U.S. cotton for reliable quality and delivery has translated into a 4¢/lb. premium on the world market. A near-record level of exports of the 1994-95 crop (9 1/2 million bales) thus translated into a \$450 million positive impact on the U.S. trade balance. The Cotton Quality Laboratory has led efforts for worldwide adoption of this system. Additionally, technology involving mild water washing, dust suppressants, and microbiological control developed at this location contributed to the reduction of the Cotton Dust/Byssinosis problem facing the textile industry. The imposition of a stringent cotton dust standard by the Occupational Safety and Health

Administration (OSHA), effective in 1996, resulted in the closure of many small cotton mills. A combination of ARS research at Clemson and a multi-billion dollar investment by the textile industry in new machinery drastically reduced the exposure of workers to cotton dust, and led to compliance with OSHA standards. Grain elevators and swine and poultry confinement facilities are currently using this technology as well.

East Grand Forks, Minnesota - Research at the Potato Research Laboratory in East Grand Forks, Minnesota, has solved problems affecting the U.S. potato industry's profitability, competitiveness, and marketability, and has provided consumers with a high-quality, low-cost, convenient, nutritious, year-round food source. Researchers at East Grand Forks developed nationally approved agricultural design standards for proper long-term storage of potatoes; and a universally accepted method for producers to assess the internal composition of potatoes and to predict the crop's maturity for subsequent storage conditions and market uses. Research at this location also showed that potatoes with high solids content yield more and nutritionally better products, and therefore have more value for processing. FDA-approved labeling of fresh pack potatoes with consumer nutritional information resulted from the determination of the nutrient content of fresh and cooked potatoes by ARS scientists at this location. These scientists also discovered natural potato compounds that safely control sprouting in stored potatoes, and identified a specific biochemical system in potatoes that must be activated for expression of key disease resistance mechanisms in farm-stored and seed potatoes. Accomplishments at this location also include discovering which genetically-accelerated natural cellular changes eliminate skinning damage of potatoes and provide resistance to bacteria and fungi; and development of a rapid, inexpensive technique to screen genetic crosses for resistance to skinning damage in varietal development programs.

Orono, Maine - The New England Plant, Soil, and Water Laboratory in Orono, Maine, achieved several accomplishments toward the improvement of yield and soil productivity. Location scientists developed a potato cropping system that produces small potatoes needed by processors and seed producers. The system reduces the need for pesticides by 25 percent while increasing farm income 20-fold. A soil fertility management system developed at the Orono location, which measures crop nitrogen need and nitrogen content of organic matter in the soil, decreased by 25% the need to add nitrogen fertilizer to maintain crop yield and quality. A tillage and crop rotation system was also developed that reduces by 65 percent the incidence of black scurf, a major disease of seed potatoes. A crop rotation sequence developed for potatoes resulted in significantly increased water absorption and consequent decreased soil erosion. Researchers also developed a white lupin management system that provides an alternate source of protein for animal feed, a valuable winter rotation crop in the deep South and California, and a summer rotation crop in the North. Lupin, a legume that produces organic nitrogen and increases soil fertility, produces feed for farm animals and edible beans for humans.

El Reno, Oklahoma - Scientists at the Grazinglands Research Laboratory, El Reno, Oklahoma, have produced several significant accomplishments. They demonstrated that beef cattle grazing winter wheat pasture maintain economical weight gains during periods of wheat pasture deficit when given access to silage. This led to the finding that use of OK-906 Agrotricum, a wheat-wheatgrass cross, will extend the wheat grazing season by 30 to 45 days. ARS research at El Reno also led to the development of strategies for grazing Old World bluestem pastures (4 million acres in region) which increased beef production by 3-fold compared to grazing conventional native range. Additional accomplishments include: reporting practical uses of kenaf as a new forage source for beef cattle; demonstrating that calves weaned from cows grazing fescue pasture (\$4 billion industry) perform equally well in stocker and finishing phases of beef production as compared to calves weaned from cows grazing Bermudagrass pasture; no-till practices in a

wheat pasture/cattle production system increase near-surface organic matter, improve water holding capacity, reduce soil erosion, and protect water quality; cattle fed finishing diets of either corn silage or grain-based diets produce the same amount of carcass fat; and lean beef (22 percent fat) can be produced with only a 45-day finishing period, with 75 percent of the carcasses grading choice.

Houma, Louisiana - The Sugarcane Research Unit in Houma, Louisiana, released 37 commercial sugarcane varieties (approximately 390,000 acres) accounting for 100 percent of sugarcane grown in Louisiana and 90 percent (approximately 37,000 acres) of that grown in Texas. Geneticists at Houma perfected a protocol to detect leaf scald--a potential threat to sugarcane on the U.S. mainland--that is more accurate and less costly and time consuming than previously used methods. Pathologists developed alternate treatment methods to cure diseases of sugarcane, and provided independent verification of the value of micropropagation tissue-culture for disease control. More than 60 percent of the sugarcane industry currently uses tissue-culture methods of disease control developed at Houma to produce disease-free seedcane. The Integrated Pest Management program developed at Houma for managing harmful insect infestations became a model for the sugarcane industry and for other commodities as well. A recurrent selection program, unique to the sugarcane world, increased the levels of resistance to insect pests and decreased the use of insecticides. Integrated weed control program research led to reduced grower dependency on herbicides by identifying cultural strategies and weed threshold levels, improving the effectiveness of currently labeled herbicides, and identifying new environmentally friendly herbicides.

Jackson, Tennessee - Scientists at Jackson, Tennessee, released 10 new soybean varieties with improved resistance to the soybean cyst nematode (SCN). They evaluated more than 2,500 accessions in the soybean germplasm collection and identified more than 30 that are resistant to at least one race of the SCN, two of which are resistant to the three most prevalent races of nematode in the U.S. The Germplasm Resources Information Network makes this information available to scientists worldwide. The Economic Research Service estimated the value of SCN resistance in the Forrest variety alone to exceed \$401 million during a six-year period. Research conducted on SCN infested soil provided farmers and extension personnel with information on how to best utilize resistant varieties in controlling the nematode.

Miami, Florida - The Subtropical Horticulture Research Station in Miami, Florida, developed nearly all commodity treatments against the Caribbean Fruit Fly. Use of these treatments resulted in the opening of multi-million dollar national and international markets, including Japan, to carambola, mango, avocado, "Tahiti" lime, and other citrus. U.S. markets also opened for commodities traditionally found only in South and Central America; treatments developed for mango, for example, resulted in \$2.5 million in U.S. imports in 1994. This work also averted market losses and economic disaster due to incidents of fruit fly infestation. ARS scientists at Miami also identified hosts, produced large-scale fumigation techniques, and developed coatings to protect fruit, and developed alternatives to chemical treatments, including thermal and irradiation techniques. Researchers additionally crossed tropical passion fruit with maypop to create a freeze resistant variety; developed a simple, reliable, cost-effective molecular technique to detect Avocado Sunblotch virus; and cooperatively developed citrus coatings that influence yeast development and prolong shelf life.

Sidney, Montana - Accomplishments at the Soil and Water Research Center at Sidney, Montana, include: development of fertilizer requirements for dryland crops and irrigated sugar beets; a reduced tillage system for sugar beets; the discovery of the causes of and the establishment of reclamation methods for saline seeps; and identification of the relationship between residue decomposition and erosion control. A national model for range hydrology and yield was developed using data developed by ARS scientists at

Sidney. Scientists there also perfected methods to reduce soil erosion with permanent grass row barriers, and tillage methods to reduce water runoff from snowmelt on frozen soils; improved methods of managing crop residue for soil and water conservation; confirmed that annual cropping improves soil quality and is more practical and profitable than fallow-crop; and established crop rotation research for sustained agricultural production. The Sidney location established a multi-state leafy spurge biological control research program, and made information on leafy spurge available on CD-ROM. Finally, Sidney researchers identified Australian grasshopper egg parasites as biocontrols of native grasshoppers, and showed the effectiveness of three insect biocontrol agents on weeds.

Brownwood, Texas - The Pecan Genetics & Breeding Research Unit in Brownwood, Texas, released 20 improved varieties of pecans that set the standards of yield and quality for every pecan producing region. For example, the Wichita variety produces the highest sustained yields of any variety on record, while Pawnee, the most aphid-resistant variety ever tested, requires fewer environmentally damaging chemicals. Similarly, scab-resistant varieties require fewer pesticides: the Caddo, Oconee, and Houma varieties developed at Brownwood have excellent scab resistance. Released in 1994, the Navaho variety yielded twice as much as the standard variety in tests. Brownwood scientists determined the basis for the heritability of important genetic traits such as scab resistance, nut quality characteristics, and tree blooming type. They also defined the importance of rootstocks in pecan production and established a rootstock breeding program. The Breeding Program developed biochemical genetic markers and created the largest, best documented collection of pecan varieties, native pecan seedlings, and other hickory species in the world.

Reno, Nevada - The Conservation Biology of Rangeland unit in Reno, Nevada, is the nationally recognized authority on growing plants from seed on desert ranges. Researchers developed methods of seeding Indian ricegrass, the most important forage species on winter ranges, that reduced costs from \$70 to \$6 per acre while increasing stand establishment. The precious metal mining industry, a \$2.7 billion a year industry in Nevada, depends on seeding and native plant material technology developed largely by this project. In addition, scientists developed two widely accepted technologies--fuel breaks that prevent wildfires, and reclamation processes that restore ranges after fires--that save millions of rangeland acres annually.

Brawley, California - The Brawley, California, location functions as a worksite for Western ARS research projects conducted in conjunction with the University of California, the University of Arizona, USDA-Animal Plant Health Inspection Service, California Department of Food and Agriculture, and Agriculture Canada. A cooperative research project at the Brawley location involving triploid carp was used to completely clean up 700 miles of hydrilla-infested canals operated by the Imperial Irrigation District (IID). Researchers at Brawley identified a pest (Admire) that effectively controls whitefly on vegetables and cotton, thus providing abundant crop production in the arid southwest. Scientists at this location also discovered that water use by alfalfa is reduced by a subsurface drip system compared to conventional surface irrigation, due to reduced evaporation from the soil surface. This technology has resulted in water savings and increased yield. Research conducted on the tolerance of plants to salty growing conditions has shown that some plants grow well under quite saline conditions. The studies have allowed farmers to blend salty drainage and runoff water with less salty irrigation water to grow their crops. This research has worldwide applications, since saline soils are a constant challenge to farming practices in many regions. An ARS scientist at Brawley was the originator of the "Imperial Star" artichoke, one of the first artichokes to be grown from seed rather than from cuttings. Imperial Star is considered to be among the most widely adapted of all artichokes.

PENNINGTON BIOMEDICAL RESEARCH CENTER/DELTA NUTRITION INITIATIVE

Question: The Pennington Biomedical Research Center, Baton Rouge, Louisiana, is a state-of-the-art human nutrition research center. It is uniquely situated to carry out a human nutrition research program for the Southeast with special emphasis on nutrition and obesity. How important is nutrition research as it relates to obesity to ARS' overall human nutrition program and what effort is currently being placed in this area? What role could the Pennington Center play in this program? What additional resources would be required to adequately fund this critical research?

Answer: ARS has a nationally focused program related to diet and nutrient partitioning for growth, physical fitness and aging in which energy intake and metabolism are major components. The energy consumption-expenditure imbalance that results in obesity is a primary health and nutrition concern of the American people. The connection between obesity and chronic diseases--diabetes, hypertension, and others--is the program responsibility of the National Institutes of Health (NIH). NIH funds obesity and nutrition centers at the St. Luke's Roosevelt Hospital-Columbia University in New York City, University of Vermont, New England Medical Center in Boston, and University of Pittsburgh in Pennsylvania.

The ARS Human Nutrition research role related to obesity is to understand the interactions of food habits, lifestyles, and metabolic pathways of energy storage and utilization. The goal is to develop scientifically sound, practical guidelines for individuals to enable them to have a healthy life adapted to a personally acceptable eating and activity pattern.

ARS has nutrition and obesity research projects at the Beltsville Human Nutrition Research Center (BHNRC) where true energy expenditures can be determined by direct calorimetry in room calorimeters and by use of stable isotope labeled water in free-living conditions. These studies have shown important aspects of gender and racial differences in adipose tissue accumulation and patterning in the body. Large controlled feeding studies can be conducted to find acceptable food choices and activity patterns to support maintenance of muscle and bone strength in adults.

At the Grand Forks Human Nutrition Research Center (GFHNRC), weight gain and loss are studied in relation to maintenance of bone strength and satisfactory mineral nutrition. Weight loss results in bone loss that may not be compensated by diet or exercise and may be cumulative with repetitive weight gain and loss. The ARS effort is to identify eating patterns that can be maintained and will result in conservation of bone and muscle throughout life.

The facilities at the Pennington Center are suitable for human studies on energy expenditure and body composition. Nearby populations would be important resources for further defining racial and gender aspects of weight control in the development of hypertension and diabetes.

Question: In FY 1995 funds were appropriated to initiate a multiyear human nutrition research and intervention initiative in the lower Mississippi Delta region. Six institutions including the Pennington Biomedical Research Center and Southern University were to participate in this initiative. Please describe for the Committee the status of the planning and implementation of this program.

Answer: Specific Cooperative Agreements between ARS and each of the six partners were executed January 1, 1995. An ARS site team of researchers in the subject matter field visited each of the institutions in March. Representatives from the six partners and nutrition intervention specialists will meet April 26-28 to develop a vision statement and strategic plans for the project. Workshops will be held in the summer to develop assessment tools, discuss research design and to more fully develop specific aspects of the project. Some institutions are recruiting new faculty for the initiative.

Question: What is the role of each of the six institutions in this research and intervention program? What is ARS' role in this effort? What resources are allocated to each of the participants?

Answer: The six institutions and ARS are equal partners in this research and intervention program. Each of the partners has an unique and substantial contribution to make to the project and its success. Currently, all are involved in developing the vision statement and strategic plans that will clearly delineate the roles of each. ARS provides oversight and coordination. The \$1.5 million appropriated by Congress in FY 1995 has been divided equally among the seven partners each receiving \$210,000.

Question: What is the long-time plan for the lower Delta nutrition initiative? What funding level is required over the next five years to carry out this plan? Is authorization language needed or recommended to carry out this plan?

Answer: After project planning and pilot testing of the research methodology in the first 3 years of the initiative, nutritional assessments of representative samples of the lower Delta population and implementation of intervention strategies will be carried during the next five years. For FY 1996, ARS is requesting an additional \$1.0 million to raise the total support level to \$2.5 million. Original plans for the initiative called for an increase of \$2 million per year for each of 5 years in order to reach a target total level of \$10 million base funding per year to effectively carry out the nutrition research and intervention initiative.

SOUTHERN REGIONAL RESEARCH CENTER (SRRC) IN NEW ORLEANS/
ARS BATON ROUGE RESEARCH LOCATION

Question: Please describe the work you do at the Southern Regional Research Laboratory (SRRC)? What are the resources allocated to these programs?

Answer: The work of the Southern Regional Research Center (SRRC) is devoted to research on food safety, food quality, fiber processing and new uses. Major initiatives in this research program, which uses chemical, biochemical, and engineering tools, include: technologies for cotton fiber assessment and quality enhancement; technologies for cotton fiber and textile processing and product development; physiology of cotton fiber development; environmentally acceptable pest control technologies; biotechnical means for prevention of aflatoxin formation in cottonseed and corn; flavor quality enhancement in peanuts, meat, and catfish; and conversion of cottonseed, milk, rice, and lipids to value-added products.

The fiscal resource level for research programs at the SRRC in FY 1995 is \$17,829,100.

Question: ARS is modernizing the SRRC. What has been done to date, and what remains to be done? How much additional resources are required to complete SRRC modernization?

Answer: The SRRC was constructed in 1940. As with any 50+ year old structure, modernization has become essential to meet current health, safety, and other laboratory standards. The magnitude of the renovation, estimated at \$19.8 million for chemical, administrative, and pilot plant wings, made phasing necessary over 8 years. Since FY 1991, a total of about \$16.5 million has been allocated to the modernization program at SRRC. Phase 5 of the construction is now underway, and Phases 6 and 7 are scheduled for contract award in the fourth quarter of FY 1995. The budget proposal for FY 1996, now before Congress, requests an additional \$900,000 to complete the chemical wing renovation and associated site repairs.

Question: Please describe for the Committee recent research accomplishments that have come out of the SRRC.

Answer: There are several very significant accomplishments from the SRRC research. These include: a new type of core-wrapped cotton yarns that provides the combined comfort characteristics of cotton with the strength of synthetic fibers; a new, environmentally preferred, nonformaldehyde permanent press system for cotton fabrics that has been licensed to 3 companies; a soon-to-be field tested fungal organism that is competitive with natural

microflora but does not produce aflatoxin; and defined production management systems that avoid off-flavor in catfish production.

Question: Please describe the research ARS carried out at the Baton Rouge research location and the resources for fiscal years 1994-1996.

Answer: Two major ARS programs are carried out at Baton Rouge: (1) water table management for crop production, and (2) management of honey bees. The research on water table management is being integrated with tillage, fertilizer, and pesticide management to improve water quality and protect wetlands. The research on honey bees is aimed at characterizing changes in the honey bee population in areas where there has been an influx of Africanized bees; assessing the effects of the changes in honey bee strains on their pollination ability; devising new strategies for managing the process of pollination; breeding strains of honey bees that are resistant or tolerant to mites; and developing strategies for breeding honey bees with desirable traits. Funding levels for this research work for the three fiscal years 1994-1996 are: \$1,965,700; \$1,965,200; and \$1,965,200 respectively.

Question: What are some of the major findings that have come from the ARS research at the Baton Rouge Center?

Answer: Recent ARS research on water management has demonstrated the important role that the flow of water through soil has on the movement of pesticides and plant nutrients. Subsurface drainage has been shown capable of reducing pesticide losses in runoff water by as much as 50 percent, because of enhanced infiltration and an increased rate of degradation of the applied pesticide during its movement through the root zone. The research also has established that controlled drainage has the potential to improve plant growth, crop yield, and the environment, thereby providing farmers with a water management technology that has significant economic and environmental benefits.

The Honey Bee Breeding, Genetics, and Physiology Laboratory has developed the official USDA procedure to identify Africanized bees; demonstrated the potential for hybridization to moderate the problems caused by Africanized honey bees; devised mating procedures that retain pure matings for European bees while also enhancing the hybridization of Africanized bees; and provided specific management methods for Africanized bees. Also, two stocks of honey bees imported from England and Yugoslavia have been extensively tested for their resistance to parasitic mites, and because of their proven resistance, released to the industry.

QUESTIONS SUBMITTED BY SENATOR BYRD

APPALACHIAN SOIL AND WATER CONSERVATION RESEARCH LABORATORY

Question: Mr. Plowman, last year, resources were provided for agroforestry research as well as for the purchase of land and other improvements to save leasing costs at Beckley. What progress has been made in these areas?

Answer: Three parcels of land have been identified for consideration by location staff. Preliminary title searches and initial environmental surveys have been completed and reviewed by the Office of the General Counsel. Current actions and plans in progress include: (1) an archaeological survey to establish historic status, (2) more in-depth environmental surveys, and (3) appraisals of land to determine the fair market value of the land on which offers to the owners will be based. Closure by the end of fiscal year 1995 is anticipated.

Two agroforestry research investigations have been initiated with the objective to improve water and nutrient use efficiency. Both projects involve improving pasture productivity with two species of appropriately spaced trees, black locust and honey locust. Additional studies are being planned for land to be purchased. These studies, directed towards enhanced economic diversity in the Appalachian region, will incorporate tree species

for nut and fruit production and short-term timber rotation. After land acquisition, agroforestry funds will be used to add a scientist to the existing Location staff. We propose that this be an ecophysiologicalist to investigate aspects of production under low light levels (e.g., canopy relationships, nutrient cycling, integrated pest management).

Question: Please advise the Committee of the potential of agroforestry industry in stimulating economic development in the Appalachian region and describe research progress being made in this area.

Answer: Agroforestry has the potential to increase the economic stability of rural communities by producing a range of annual crops as well as longer-term tree crops as raw materials for local value-added enterprises. The Appalachian region is dominated by deciduous forests. Agroforestry seeks to take advantage of natural ecological processes to improve farm productivity. The goals of agroforestry research are to: (1) improve and diversify yields from rural farms to improve their economic status; 2) reduce resource degradation from erosion and minimize chemical nutrient and pesticide inputs which contribute to on- and off-site environmental hazards; and 3) improve the efficiency of land resource utilization.

Agroforestry research is relatively new to North America; however, research has indicated that inclusion of trees in pasture systems can add diversity to the products generated on hill farms and improve the stability of small farm income. Grazeable timberland is being studied in Oregon. The use of specialty tree species, such as black walnut in tall fescue pastures in the midwest, fruit trees in western pastures grazed by sheep, and pine trees in pastures of family farms in the mid-south and southeastern U.S., are also being investigated. For example, tree species such as black locust and black walnut, when grown in pastures, have been shown to increase forage yield by enhancing the nutrient levels of surrounding soil and limiting growth of undesirable plant species. Honey locust produces large fleshy pods that may serve as nutritious animal feed. Research with black locust and honey locust at the Appalachian Soil and Water Conservation Research Laboratory was initiated in the summer of 1993 to develop approaches to utilize landscapes with slope and microclimate limitations. Because several years are required to establish trees, data collection has only just begun.

Question: Please describe research being done regarding the utilization of coal combustion by-products, which is generated abundantly in West Virginia, as a means of managing acidic hill-land soils for improved growth of forage and crop plants.

Answer: At the Appalachian Soil and Water Conservation Research Laboratory, coal combustion by-products (CCB's) rich in calcium and sulfur are being evaluated for improvement of acid hill lands and enhancement of the quantity and quality of forage and field crops. These products provide calcium needed for beneficial root growth, and the sulfur component reduces the toxicity of aluminum in the soil. CCB's high in calcium, magnesium, and sulfur resulted in improved shoot and root growth and mineral composition of corn, orchardgrass, tall fescue, gamagrass, white clover, and alfalfa. Several approaches were identified to overcome sulfite toxicity associated with certain CCB's. We have established a Cooperative Research and Development Agreement (CRADA) with Dravo Lime Company, Pittsburgh, Pennsylvania, and filed a patent disclosure based on our research findings. These efforts are addressing development of products and technology compatible with agricultural utilization.

Question: Please identify the Department's current research efforts including funding and scientific support of each project at the Appalachian Soil and Water Conservation Research Laboratory.

Answer: Research projects and their FY 1995 funding levels at the Appalachian Soil and Water Conservation Laboratory include: (1) Alleviation of acid soil constraints to plant growth, \$905,000 [2.0 scientist years (SY)]; (2) Selection and improvement of plants for infertile acid soils, \$820,600 (3.5 SY); (3) Livestock grazing systems and water quality in Appalachia, \$670,200 (2.1 SY); (4)

Management and ecology of pastures and agroforestry in the Appalachian region, \$687,100 (2.3 SY); and (5) Forage legume breeding for the Appalachian Region, \$360,000 (1.0 SY).

Question: Please provide significant accomplishments attributed to each project.

Answer: The following significant accomplishments are provided for the record.

Alleviation of Acid Soil Constraints to Plant Growth.

Production of sulfur dioxide gas associated with incorporation of calcium sulfite-rich coal combustion by-products (CCB's) into acid soils was shown to be responsible for toxicity to plants. Adding magnesium to CCB's rich in calcium and sulfur improved crop growth in acid soils. Controlled studies indicated that CCB's rich in calcium and sulfur improved root growth and water use by several plant species. Various research findings with CCB's in acid soils have led to the filing of a patent disclosure and the establishment of a Cooperative Research and Development Agreement with Dravo Lime Company, Pittsburgh, Pennsylvania. Information generated on absorption and accumulation of nickel in forage and crop plants is contributing to bioremediation technology.

Selection and Improvement of Plants for Infertile Acid Soils.

Vesicular-arbuscular mycorrhizal (VAM) fungi have enhanced the growth of plants in highly acidic soils (pH 4.5 and less). Research is underway to improve fixation of nitrogen by legumes growing in acid soils. Twenty-eight orchardgrass entries have survived in acid soils (pH 4.0) and survived drought stress in field conditions. A model of the factors that influence mineral toxicities has been developed and is being used to study the identity of the aluminum forms that cause toxicity in plants and to explain the ability of calcium and magnesium salts to reduce mineral toxicities in plants.

Livestock Grazing Systems and Water Quality in Appalachia.

Grazing ruminants were fed seeds of legume species and the seeds were distributed via fecal deposition. This technique has improved overall forage quality in steep and rocky pastures that are inaccessible by machinery. Studies of the impact of grazing animals on environmental quality in hill-land pastures have shown that fecal macronutrients need to be considered when nutrient management plans are developed to reduce potential nonpoint sources of pollution in these agricultural systems. Knowledge of sources and timing of nitrates in karst groundwater obtained from nitrogen isotope ratios is helping agricultural land managers develop best management practices and strategies to reduce manure and fertilizer nitrate contributions to the groundwater.

Management and Ecology of Pastures and Agroforestry in the Appalachian Region. Growth responses have been described for a range of cool- and warm-season grasses and cool-season grass/legume mixtures grown under low-input and marginal soil-resource conditions. Management practices have been developed that minimize soil erosion through maintenance of an intact plant canopy, restrict nutrient inputs, and virtually eliminate the use of pesticides. Identification of cold-tolerant, warm season grasses that can be as productive as cool-season grasses in the northeastern United States, despite the shorter growth interval for warm-season grasses, has provided pasture managers with increased flexibility in dealing with hot, dry mid-summer conditions. Research has shown that plants such as prairiegrass that are promoted for diverse problem environments may not contribute to sustainable agricultural activities in the eastern U.S., where stand failure can result from an array of physiological and environmental conditions. A remote sensing technique, developed to quantify drought in pastures, allows producers to time implementation of management practices to minimize economic losses due to drought. Feeding studies using herbage from the stress tolerant, perennial, conservation legume flatpea revealed that cattle could perform acceptably on diets that caused adverse health effects in sheep.

Forage Legume Breeding for the Appalachian Region. A legume breeding project with the overall purpose of developing improved

clovers for Appalachian pastures was established at the ASWCRL during FY 1995. The objectives of this project are to develop more persistent and productive white clover, birdsfoot trefoil, and other perennial clovers by improving: tolerance to abiotic stresses such as acid soils; compatibility with grasses (rather than growth in monocultures); and adaptation to grazing by livestock (rather than to mechanical harvesting). The initial effort will focus on white clover. Initiation of this project will help to reverse a 10 to 15 year trend of declining genetic research with perennial clovers. No other white clover breeding projects exist in the Northeast or the Appalachian Region.

Question: Are any of the research projects at the Laboratory included in the proposed reduction or termination of programs in Fiscal Year 1996? Please provide funding and staffing levels for this facility in Fiscal Year 1995 and 1996.

Answer: None of the research projects at the Laboratory is included in the proposed reduction or termination of programs in Fiscal Year 1996. The Appalachian Soil and Water Conservation Laboratory received \$3,442,900 in ARS funding in FY 1995, with an additional appropriation of \$855,000 to purchase land and facilities, and has a staff of 55 full-time employees. We estimate similar funding for FY 1996, with the \$855,000 being used to complete facilities improvements and to hire an additional scientist and support staff to strengthen the agroforestry research program.

Question: Please identify additional program and resource requirements to enhance the productivity of this facility.

Answer: The FY 1996 Budget Request of \$709,810,000 will ensure the productivity of the Laboratory.

FRESHWATER INSTITUTE

Question: Mr. Plowman, please describe the programs being carried out through your cooperative research arrangements with the Freshwater Institute at Shepherdstown, West Virginia. Detail the specific research projects and problems currently being addressed.

Answer: Programs being carried out through cooperation with the Freshwater Institute at Shepherdstown, West Virginia, include the broad areas of water quality control in intensive recycle aquaculture production systems, use of impaired water resources for aquaculture production, and horticultural crop production from aquacultural waste water. Specific projects currently being addressed are the identification of constriction points in the production system for the weekly production of 300-600 pounds of rainbow trout; control of the build-up of carbon dioxide in water; improvement in the efficiency of the automatic fish feeding system; evaluation of oxygenation on water quality; evaluation of fluidized sand biofilters for removal of dissolved nutrients; production of high value crops like lettuce and strawberries to remove nutrients from the fish waste water production effluents; and innovative ways to meet phosphorus discharge requirements of waste water.

Question: What progress and/or accomplishments have been achieved through this cooperative research arrangement? What are the funding levels provided for these efforts in Fiscal Years 1994, 1995, and 1996?

Answer: This cooperative research arrangement has shown that high sustained production of trout (300 to 600 pounds per week) is feasible and that high value crops (lettuce and strawberries) can be grown from the filtered fish tank effluent with no supplemental lighting and with minimal mineral supplement. Examples of specific accomplishments are: completion of a draft operation manual for small scale flow through tank systems for cold water fish production; developed and demonstrated an improved feed controller that prevents feed wastage and thereby improves feed efficiency 30-50 percent; and designed and evaluated a model wetland system to meet phosphorus discharge reduction requirement to parts per billion level.

Funding of \$1,472,200 per year for each of fiscal years 1994-1996 is provided for these efforts.

Question: What additional areas of research are required to further enhance the productivity of the Department's research on cold water aquaculture?

Answer: A 1992 ARS document relating to the Agricultural Research Service National Center for Cold Water Aquaculture is still relevant and appropriate in 1995. This document identified programs needed to conduct biological, engineering, and economic research on the highest priority national programs of the cold water aquaculture industry. The research should be conducted on trout, salmon, and other species having potential for cold water aquaculture enterprises. The research should address the needs and problems of large, small, and intensive production systems, including genetics, nutrition, diseases, water management, waste management, product quality, economics and marketing.

APPALACHIAN FRUIT RESEARCH STATION

Question: Dr. Plowman, last year, additional resources were provided for increased research on the use of sensors as a means of improving fruit grading. Please explain the progress of research in this area and the impact of this additional funding in meeting the research objectives.

Answer: Imaging techniques were developed that correctly classify 80% of apples with bruises 11-15 mm in diameter and 100% of bruises greater than 15 mm. Additional resources have provided an opportunity to explore emerging technologies for measuring the postharvest quality of apples. X-rays for detecting watercore, internal browning, insect infestation, firmness, and decay in apples are being investigated through an agreement with the University of Georgia. Formal agreements with Purdue University and the University of California are providing opportunities to explore magnetic resonance for measuring watercore, internal browning, insect infestation and soluble solids in apples. At Purdue University, studies are limited to nonimaging applications of magnetic resonance, while magnetic resonance imaging is being investigated at the University of California. Development of the near-infrared imaging technique into an automatic inspection system is being accomplished through a cooperative agreement with Cornell University and a Cooperative Research and Development Agreement with Agri-Tech, Inc. Accurate nondestructive techniques for assessing the postharvest quality of fruits and vegetables would be an asset to the industry. Correct decisions about the initial quality of each apple would reduce the postharvest losses by eliminating the storage and transportation of inferior apples. An automated inspection system for detecting watercore, bruises, internal browning and other blemishes would provide an opportunity to enhance the quality of packed apples, decrease packing costs, and increase returns to fruit growers.

Question: Please identify the Department's research projects being carried out by the Appalachian Fruit Research Station and identify the funding and scientific support for each.

Answer: Research projects being carried out by the Appalachian Fruit Research Laboratory, FY 1995 funding for these projects, and scientific support in scientist years (SY) are provided for the record. The information follows:

Molecular biology and genetic engineering of fruit trees; \$850,100; 3.6 SY

Cold hardiness and stress adaptation; \$276,300; 1.0 SY Breeding and cultivar development of pear and peach; \$545,400; 1.5 SY

Biological management of deciduous tree fruit insect and disease pests; \$377,600; 1.9 SY

Plant systems for aquacultural waste treatment; \$491,100; .40 SY

Mechanization for deciduous tree fruits and brambles; \$306,500; 1.20 SY

Vegetation and soil management in fruit production; \$578,100; 2.30 SY

Cultural management for increased production efficiency in deciduous tree fruits; \$616,800; 2.0 SY

Deciduous fruit crop diseases; \$446,400; 2.10 SY

Assessing nondestructive technologies for postharvest quality of deciduous tree fruits; \$422,500; 1.0 SY

Question: Please provide the accomplishments made by the Station in developing naturally-based products that can be used by the fruit industry as alternatives to pesticides control of post-harvest rotting.

Answer: Recent research accomplishments include the following:

Two new natural, microbe-based products that control postharvest rots on apples, pear, and citrus were registered by the U.S. Environmental Protection Agency. These are the first biofungicides registered and commercialized in the United States. The first product, "Aspire," is made from the yeast Candida oliophila and will be marketed by ECOGEN of Langhorne, PA. The other, "Bio-Save II," is made from the bacterium Pseudomonas syringae and will be marketed by EcoScience, Worcester, MA.

Scientists discovered that a hydrophobic clay can reduce the incidence of fire blight and apple scab and also repel major insect pests of apple and pear. The material is being field tested as a dust application using an Appalachian Fruit Research Station patented dust applicator.

A method was developed to select mixtures of natural microbial agents with superior postharvest disease control potential.

A "bioactive coating" to control postharvest diseases was developed and tested. The coating utilizes chitosan, an antagonistic yeast and natural fungicide. Preliminary tests showed excellent disease control.

A patent was filed for "Controlled release fumigation of harvested agricultural commodities." This new technology utilizes activated carbon to slowly release volatile natural compounds that prevent postharvest decay of fruits.

Question: Significant losses are occurring each year in the production of peaches due to plant stress. Please advise the Committee of the progress being made by the Appalachian Fruit Research Station in identifying stress-resistant genes which would enhance quality in the production of peaches.

Answer: Freezing temperatures can significantly reduce peach productivity, sometimes ruining as much as 98% of the peach crop in a given region. Previous research has identified stress-related proteins correlating with the peach tree's response to freezing temperatures and possessing the ability to protect other proteins from cold damage. Recently a gene encoding one of these proteins (peach bark dehydrin) was identified and isolated.

Losses in peach quality due to poor "storability" adversely affect the industry. Recent progress in understanding genes responsible for determining quality traits has led to the discovery that a number of stress-related genes are associated with peach fruit ripening and softening. A gene encoding a low-molecular weight heat shock protein and a dehydration-responsive gene has been isolated and shown to be associated with the latter stage of fruit development.

Serious losses in peach tree productivity due to unexpected cold temperatures during flower development could be avoided if the timing of flower opening and maturation could be controlled. As part of a peach genome mapping project in conjunction with researchers at Clemson University, ARS scientists at the Appalachian Fruit Research Laboratory are mapping specific genetic markers linked to the timing of flower appearance so that this trait can be identified in young seedlings without costly field selection studies.

Question: Please identify recent research accomplishments by the Appalachian Fruit Research Station of significance to the fruit industry.

Answer: Recent research accomplishments of the Appalachian Fruit Research Laboratory (AFRL) are provided for the record. The information follows:

Two new natural, microbe-based products that control postharvest rots on apples, pear, and citrus were registered by the U.S. Environmental Protection Agency. These are the first biofungicides

registered and commercialized in the United States. "Aspire" is made from the yeast Candida oliophila and will be marketed by ECOGEN of Langhorne, PA. "Bio-Save II" is made from the bacterium Pseudomonas syringae and will be marketed by EcoScience, Worcester, MA.

A gene for virus resistance has been transferred into grape via genetic engineering. This is the first successful report of genetically engineering an important grape variety.

A mechanical harvester for fresh-market blueberries was developed and tested. The yield of fresh, market-quality berries was two to three times better than for currently used commercial blueberry harvesters.

Scientists discovered that a hydrophobic clay can reduce the incidence of fire blight and apple scab and also repel major insect pests of apple and pear. The material is being field tested as a dust application using an AFRS patented dust applicator.

Additional cold-regulated proteins correlated with cold hardiness levels in peach trees were identified. Efforts were successful in identifying and isolating the genes encoding these proteins with the potential to manipulate them through genetic engineering to improve the tree's ability to resist damage due to cold or drought.

A new concept for constructed wetlands was developed, using vertical flow, that increases productivity and nutrient removal. The constructed wetlands were developed to serve as a bioscrubber for the location's cooperative aquaculture project.

Engineers developed imaging techniques that correctly classify 80 percent of apples with bruises 11-15 mm in diameter and 100 percent of bruises with diameters greater than 15 mm.

Studies confirmed that low rate multiple sprays of the plant bioregulator ethephon improve apple red color, enhance sugar content, and reduce starch without reducing fruit firmness. Industry is interested in pursuing label registration.

A natural insecticidal plant compound (not-toxic to humans and animals) has been identified and found to provide nearly 100 percent control of pear psylla. This compound and formulations of fungal pathogens developed by AFRS scientists could result in a 50 percent reduction in the use of chemical insecticides to control psylla. A CRADA has been established with a biocontrol marketing company for large-scale production of fungal spores for orchard testing.

Production systems for eastern thornless blackberry were developed, and field tests demonstrated that plants could be machine-harvested with fruit retaining fresh-market quality for three days. Studies to evaluate blackberry juice quality showed quality equal to the industry standard 'Marion'.

A method was developed to select mixtures of natural microbial agents with superior postharvest disease control potential.

A "bioactive coating" that utilizes chitosan, an antagonistic yeast and natural fungicide to control postharvest diseases, was developed and tested. Preliminary tests showed excellent disease control.

Genetic maps for peach and pear have been developed using DNA markers to select fruit quality characteristics, cold hardiness, and pear psylla resistance before trees are grown to maturity. Development of the maps is the result of previous work in which genes associated with peach fruit softening were identified.

Genetically engineered plums, first developed by AFRS scientists, have been tested and led to the identification of plants resistant to Plum Pox Virus, a devastating European pest which threatens the U.S. stone fruit industry.

Previous studies demonstrated vegetative growth control in peach as a result of sod competition. New research has shown this dwarfing effect does not alter carbon partitioning within the peach tree. This is important in relation to maintaining fruiting and high fruit quality.

Highly resistant fire blight accessions collected in Europe and grown at AFRS have been identified and incorporated into the USDA pear breeding program. Fire blight is the most destructive pear

disease in the U.S. and worldwide. The fire blight resistant selections provide breeders excellent opportunity to incorporate natural fire blight resistance into high quality pears.

Scientists have discovered that interplanting peaches with apples enhances routine biological control of insect pests. Apple acts as an attractant for insects normally outside the peach orchard's ecological community. These beneficial insects serve as bio-control agents for peach without detrimental effects in apple.

Biological control of apple orchard pests was enhanced through diversified ground cover plantings. A number of crops including dill, soybean, rye, dwarf sorghum, and buckwheat were tested and show promise.

Question: Are any of the research projects at the Station included in the proposed reduction or termination of programs in Fiscal Year 1996? Please provide the funding and staffing levels for this facility in Fiscal Year 1995 and 1996.

Answer: None of the research projects at the laboratory are included in the proposed reductions or terminations of programs in Fiscal Year 1996. The funding and staffing levels for this facility are \$4,910,800 and 62 full time employees in both Fiscal Year 1995 and 1996.

Question: Please identify additional program and resource requirements to enhance the productivity of this facility.

Answer: The FY 1996 Budget Request of \$709,810,000 will ensure the productivity of the Laboratory.

QUESTIONS SUBMITTED BY SENATORS INOUE AND AKAKA

This committee has long supported the expansion of diversified agriculture, including aquaculture, in Hawaii and in other tropical and subtropical areas of the United States. We view funds appropriated for this purpose as an investment that, more than ever before, must yield returns. In large part, the future success of U.S. tropical and subtropical agriculture depends on maintaining the research capital, both human and financial, that the Agricultural Research Service (ARS) has assembled in Hawaii. It is shortsighted to divert financial and human resources from this goal. In this context, this committee requests clarification on the proposed termination of ARS programs that will impact the expansion of diversified agriculture in Hawaii as well as national benefits derived from this work.

1. The Fiscal Year (FY) 1996 budget request terminates work initiated in FY 1995 on nematode resistance in pineapple and on the development of ringspot virus resistant papaya cultivars. Both of these projects are unique in having solid industry support and guidance while maintaining a strong science component through a peer review selection process. The nematode work addresses the development of a viable alternative to methyl bromide as a soil fumigant. The ringspot project also possesses significant national policy implications for releasing genetically modified organisms in large scale experiments and possibly under commercial scale conditions.

Question: (a) Please indicate how these activities could benefit Hawaii agriculture.

Answer: Hawaiian agriculture would benefit because improved pest control measures would increase the profitability of pineapple and papaya production. This is important to the state at this period of time, since large acreages of land are being taken out of sugarcane production.

Question: (b) How could the benefits of this research be transferrable to agriculture outside of Hawaii?

Answer: Information obtained from this research could be useful for developing disease control strategies in other pineapple and papaya production areas. Information developed for pineapple nematode control may be transferrable to nematode control in other crops.

Question: (c) How do these projects fit within the national research agenda?

Answer: Although much of the research is oriented to local agricultural production problems in Hawaii, both research projects are consistent with the national efforts to reduce the use of chemical pesticides. The pineapple nematode project could play a role in the national effort to develop alternative technologies to the use of methyl bromide as a soil fumigant. The manufacture and importation of methyl bromide will cease in the year 2001 because it has been designated as ozone depleting.

Question: (d) If terminated, where will such work be conducted?

Answer: Work on alternatives to methyl bromide for control of nematodes would continue at ARS laboratories in Orlando, Florida; Tifton, Georgia; Charleston, South Carolina; and Beltsville, Maryland. ARS does not conduct research on papaya ringspot virus. Additional work on nematode control alternatives and research on papaya ringspot virus is done by scientists at state universities.

Question: (e) If this work is not conducted elsewhere, what are the economic and environmental consequences?

Answer: If this work were not conducted elsewhere, it is likely that pineapple and papaya production losses in Hawaii due to these diseases will continue, and may increase. Environmental consequences would involve the continued or increased use of chemical pesticides. However, it appears that this work would continue at other ARS locations and state universities.

2. With four Hawaii sugar plantations closing or announcing closure during the last two years, the committee is aware of the significant structural changes in the U.S. sugar industry. There is also an awareness of the efforts of the remaining plantations to retain their competitive edge so critical in the global market environment. For example, sugar research work in Hawaii recently resulted in the development of non-toxic chemical processes to produce epoxy adhesives and additives to strengthen plastics from sugar, a renewable, as opposed to a petroleum-based resource.

Question: a. Please indicate how loss of the expertise that ARS has developed in Hawaii over several decades will impact the segment of the U.S. sugarcane industry that survives massive structural changes and seeks to remain competitive in the global market.

Answer: Major strategies of the U.S. sugarcane industry to remain competitive are to restructure to emphasize sugar as a renewable energy resource and an industrial chemical feedstock for non-food product development and uses. Current ARS supported research in Hawaii on sucrose chemistry is on the threshold of leading to promising new technologies for non-food, industrial uses of sugar. The loss of ARS support and expertise jeopardizes the completion and successful achievement of this research. However, industry and state funds could be used to continue this research if it is high priority.

Question: b. Also indicate how the loss of ARS's very unique expertise, that has been honed for addressing agricultural issues in Hawaii's fragile ecosystem, will impact the expansion of diversified agriculture.

Answer: Despite the loss of ARS sugarcane research, the remaining ARS programs in Hawaii are strongly supportive of diversified agriculture in the state. The agency's research on production and quarantine problems of other Hawaiian crops will continue to be of great economic benefit to Hawaiian agriculture, and will promote export of Hawaiian products to the mainland U.S. and to foreign markets.

Question: c. If terminated, where will this work be conducted?

Answer: Within ARS, sugarcane genetics and germplasm work will be continued at Canal Point, Florida; physiology research at Weslaco, Texas; and sugarcane processing research at New Orleans, Louisiana. It is expected that HSPA will coordinate its work with ARS to develop new technology to assist the Hawaii sugarcane industry directly.

3. The activities conducted under the ARS sponsored tropical aquaculture research program are critical in that Hawaii is the

premier site for the development of aquacultural products in a tropical and subtropical environment. Not only are there significant import substitution benefits that will accrue with expansion of U.S. aquaculture, but Hawaii provides a year-round natural laboratory to develop and test nutrition and pest management strategies that benefit the whole of U.S. aquaculture.

Question: a. If this program is terminated as proposed, where within ARS will these critical activities be conducted?

Answer: If the tropical aquaculture program is terminated, ARS will not undertake these activities at another location.

Question: b. Are there comparable natural tropical and subtropical laboratories with a full and supportive complement of research expertise in other parts of the United States?

Answer: Yes, there are comparable tropical and subtropical laboratories with a full and supportive complement of research expertise in other parts of the United States. Some institutions, locations and areas of research include the following:

The Gulf Coast Research Laboratory, located in Ocean Springs, Mississippi, conducts research on penacid shrimp maturation; cloned system growout; parasite and diseases rearing; and toxicity testing.

The Harbor Branch Oceanographic Institution at Ft. Pierce, Florida conducts fish, clam and oyster research.

The Biological Science Department at the Florida Institute of Technology, Melbourne, Florida, conducts bivalve, finfish, and crustaceans culture research.

The Indian River Marine Science Research Center, Florida Institute of Technology, Vero Beach, Florida, conducts research on mahi-mahi and red drum culture.

The Aquaculture Research & Extension Center at Texas A&M University, Corpus Christi, Texas, conducts research in the area of shrimp culture, disease, nutrition and reproduction.

The Mariculture Research Development Center, South Carolina Wildlife & Marine Resources Department at Bluffton, South Carolina, conducts intensive shrimp culture systems and feed research.

Question: c. What are the consequences of truncating a national investment in aquacultural research facilities and expertise that are just beginning to yield a return in knowledge and products such as disease resistant breeding stock and total health management strategies?

Answer: The consequences of terminating ARS support for tropical aquaculture research in Hawaii will slow progress, but will not stop the program because other funding sources also provide support for tropical aquaculture research.

COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION
SERVICE

QUESTIONS SUBMITTED BY SENATOR COCHRAN

SMALL BUSINESS INNOVATION RESEARCH ACT TRANSFERS

Question: Identify the funds transferred by ARS, CSREES, NASS, and ERS under the Small Business Innovation Research Act for fiscal years 1990 through 1995.

Answer: [The information follows:]

SMALL BUSINESS INNOVATION RESEARCH ACT TRANSFERS

Cooperative State Research, Education, and Extension Service
Research and Education Activities

Agency	FY 1990	FY 1991	FY 1992	FY 1993	FY 1994	FY 1995	Total
Cooperative State Research, Education, & Extension Service	\$3,820,788	\$4,536,608	\$5,024,828	\$6,045,841	\$6,197,748	\$8,068,668	\$33,694,481
Agricultural Research Service	175,000	229,000	397,751	408,058	429,041	671,960	2,310,810
National Agricultural Statistics Service	2,538	3,912	2,312	2,400	2,250	3,100	16,512
Economic Research Service	6,925	16,100	21,250	15,000	16,500	42,680	118,455
TOTAL	4,005,251	4,785,620	5,446,141	6,471,299	6,645,539	8,786,408	36,140,258

1890 PROGRAMS

Question: You indicate in your testimony that seven centers of excellence have been established at the 1890 institutions to address specific USDA agency priorities and that three additional centers are proposed to be established in 1996. Where are each of the seven centers established to date located? Where will the three new centers be located? What process is being used to determine which of the 1890 institutions will house the centers proposed?

Answer: The seven USDA-1890 Centers of Excellence are: The Center of Excellence on Horticulture at Tennessee State University; The Center of Excellence in Forestry at Alabama A&M University; The Center of Excellence in Aquaculture at the University of Arkansas, Pine Bluff; The Center of Excellence on Regulatory Science and Risk Analysis at the University of Arkansas, Pine Bluff; The Food Safety and Animal Health Research Center of Excellence at the University of Maryland, Eastern Shore; The Center of Excellence in Wildlife Management and Geographic Information Systems at Lincoln University, Missouri; and The World Food Distribution and Training Center of Excellence at Prairie View A&M University.

The three new centers that are proposed in fiscal year 1996 are The Center of Excellence for Rural Development at Alcorn State University, Lorman, Mississippi, The Center of Excellence for Food Safety in Aquaculture at Delaware State University, and The Center of Excellence for Water Quality Improvement at Virginia State University.

The selection process for the centers builds on the general encouragement Agency Heads have received from Secretaries of Agriculture Lyng, Yeutter, Madigan, and Espy, to look for opportunities to strengthen the programs and relationships between the Department and the 1890 institutions, and on the projects and relationships that have flowed from the Research and Teaching Capacity Building grants program that was begun in 1990. The specific direction to establish centers of excellence was set by Secretary Madigan in 1992 and by Secretary Espy in 1993. The plan is to establish on campus entities to enhance the capacity of the 1890 institution to assist in the conduct of USDA programs, garner support from other public and private agribusiness sources, and provide support for students who will be candidates for careers in agriculture. Agency Heads are encouraged to hold informal discussions with representatives of 1890 institutions with a view towards developing a mutually agreeable, multiyear plan. The USDA agency financial requirements to implement this plan become the

basis for budget requests that are considered in the Department, by OMB, and Congress in the established budget-appropriation process.

Question: What is the purpose of each of the seven existing centers and what priorities will be addressed by each of the three new centers? How is this being determined?

1. The Center of Excellence on Horticulture at Tennessee State University in cooperation with the Agricultural Research Service. This Center was established in fiscal year 1994 for the purpose of research and evaluation of germplasm of interest to the U.S. nursery industry. These evaluations complement and support the shrub and tree breeding program at the U.S. National Arboretum. The center is housed in the recently completed Nursery Crops Research station in McMinnville, TN, which is at the center of the Tennessee nursery industry.
2. The Center of Excellence in Forestry at Alabama A & M University in cooperation with the Forest Service. This Center was established in fiscal year 1994 for the purpose of increasing the pool of candidates for professional careers in the Forest Service and related public and private institutions, conducting research on the productivity of Southern forests, and using the professional faculty and staff as a source of expertise in the conduct of Forest Service activities.
3. The Center of Excellence in Aquaculture at the University of Arkansas, Pine Bluff in cooperation with the Agriculture Research Service. This Center was established in fiscal year 1994 for the purpose of research on aquaculture production problems including water quality, nutrition, and other factors of catfish production in Arkansas.

Centers established in fiscal year 1995

4. The Center of Excellence on Regulatory Science and Risk Analysis at the University of Arkansas, Pine Bluff in cooperation with the Animal and Plant Health Inspection Service. This Center is being established in fiscal year 1995 for the purpose of increasing the pool of students who will receive training in unique aspects of regulatory science that will be needed in the future workforce of the Marketing and Inspection agencies. The Center will establish a formal link for recruitment, development, and scientific studies in the emerging fields of regulatory science and risk analysis.
5. The Food Safety and Animal Health Research Center of Excellence at the University of Maryland, Eastern Shore in cooperation with

the Agricultural Research Service and the Food Safety and Inspection Service. This Center is being established in fiscal year 1995 for the primary purpose of research on ways to reduce risks of microbial contamination in poultry and poultry products at all stages of the farm-to-table food safety continuum, with particular emphasis on the preharvest segment. The center will also serve as a source of financial support for promising students who will enlarge the pool of future USDA and industry employees in this field.

6. The Center of Excellence in Wildlife Management and Geographic Information Systems at Lincoln University, Missouri in cooperation with the Animal and Plant Health Inspection Service, Natural Resources Conservation Service, Consolidated Farm Service Agency, and the Forest Service. This center is being established in fiscal year 1995 for the primary purpose of increasing the pool of trained candidates for natural resource management positions. In addition, the center will serve as a source of GIS training for USDA and university students.
7. The World Food Distribution and Training Center of Excellence at Prairie View A&M University and three other Texas A&M system universities in cooperation with the Agricultural Marketing Service, the Consolidated Farm Service Agency, the Foreign Agriculture Service, the Food and Consumer Service Agency, and the Economic Research Service. Planning, development, and beginning operations have been, and are being supported by the cooperating agencies in fiscal years 1994 and 1995 and there is a proposal for full support for the Center in fiscal year 1996 with an appropriation to the Agricultural Marketing Service. The Center is being established for the purpose of enlarging the pool of well trained and highly qualified candidates (with emphasis on African-Americans, Hispanics, and American Indians) for entry level management careers in domestic and international food and fiber transportation, distribution, and trade.

Centers proposed to be established in fiscal year 1996

8. The Center of Excellence for Rural Development at Alcorn State University, Lorman, Mississippi in cooperation with the Agricultural Research Service and the Rural Business and Cooperative Development Service. This Center is proposed to be established in fiscal year 1996 for the primary purposes of revitalization of hog farming in rural Mississippi, improvements in hog breeding stock in the region, establishment of a viable education and extension program on cooperatives, and development of a general model for rural development utilizing cooperatives.

9. The Center of Excellence for Food Safety in Aquaculture at Delaware State University in cooperation with the Agricultural Research Service. This Center is proposed to be established in fiscal year 1996 for the primary purpose of conducting research on the improvement and safety of aquaculture products. There are critical gaps in the technology needed to develop best management practices to assure microbial safety in association with aquaculture production.
10. The Center of Excellence for Water Quality Improvement at Virginia State University in cooperation with the Natural Resources Conservation Service. This Center is proposed to be established in fiscal year 1996 to develop low cost conservation systems that will improve water quality and reduce erosion in the Chesapeake Bay region and other areas of the U.S. Work at the Center will involve the development and evaluation of agronomic plantings to determine their ability to remove potential pollutants.

Question: What is the total amount of USDA funding now allocated for each center of excellence? What additional funding is requested for each existing center and for each new center for fiscal year 1996?

Answer: [The information follows]:

USDA Support for Centers of Excellence at 1890 Institutions by
Fiscal Year and Cooperating Agency
(Dollars in Thousands)

<u>CENTER AND COOPERATING AGENCY</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>
1994 Centers of Excellence			
Tennessee St.: Horticulture			
ARS	\$500	\$500	\$500
Alabama A&M: Forestry			
FS	2,172	2,172	2,172
UAPB: Aquaculture			
ARS	125	186	186
1995 Centers of Excellence			
UAPB: Regulatory Science			
APHIS	0	200	200
UMES: Food Safety			
ARS	0	250	250
FSIS	0	500	550
Lincoln, Mo.: Wildlife/GIS			
APHIS	0	225	250
NRCS	0	125	125

<u>CENTER AND COOPERATING AGENCY</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>
CFSA	0	50	0
FS	0	225	225
Prairie View, Texas:			
World Food Distribution			
AMS	45	150	1,050
CFSA	25	50	0
FAS	0	50	0
FCS	25	50	0
ERS	10	10	0
<i>Subtotal</i>	2.902	4.743	5,508
1996 Centers of Excellence			
Alcorn, MS: Rural Development			
ARS	0	0	200
RBCDS	0	0	200
Delaware St.: Aquaculture/Food			
Safety			
ARS	0	0	250
Virginia St.: Water Quality			
Improvement			
NRCS	0	0	460
<i>Subtotal</i>	0	0	650
Total, Centers of Excellence	2.902	4.743	6.158

Key to agencies: (APHIS) Animal and Plant Health Inspection Service, (AMS,) Agricultural Marketing Service, (ARS), Agricultural Research Service, (CFSA) Consolidated Farm Service Agency, (ERS) Economic Research Service, (FAS) Foreign Agricultural Service, (FCS) Food and Consumer Service, (FS) Forest Service, (NRCS) Natural Resources Conservation Service, (RBCDS) Rural Business and Cooperative Development Service.

Key to institutions: (UAPB) University of Arkansas, Pine Bluff, (UMES), University of Maryland, Eastern Shore.

NATIONAL RESEARCH INITIATIVE

Question: Please provide a summary of the geographical distribution of the Competitive Research Grants awarded under the National Research Initiative for the last two years showing the state, entity, and funding level.

Answer: [The information follows:]

National Research Initiative Competitive Grants
Fiscal Year 1993 and 1994 Recipients
(In Dollars)

<u>State/Recipient</u>	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
ALASKA		
University of Alaska, Fairbanks	\$149,895	\$312,500
ALABAMA		
Auburn University	349,022	534,237
University of Alabama.		
Birmingham	262,000	0
Alabama A&M University	50,000	130,000
University of Alabama	120,000	0
University of South Alabama	0	286,000
ARIZONA		
University of Arizona	1,448,844	1,140,857
Arizona State University	110,000	90,000
Northern Arizona University	49,976	0
ARKANSAS		
University of Central Arkansas	90,000	0
University of Arkansas.	49,886	115,000
Pine Bluff		
University of Arkansas	872,790	417,299
CALIFORNIA		
California State University.		
San Marcos	0	50,000
University of California, Davis	4,048,262	4,385,505
University of California.	1,626,500	1,814,866
Berkeley		
University of California, Irvine	410,000	0
San Diego State University	50,000	0
University of California.		
Santa Barbara	130,000	60,000
University of California.		
San Diego	1,100,000	278,800
University of California.		
Santa Cruz	35,648	143,000
University of California.		
San Francisco	187,000	0
University of California.		
Riverside	645,000	1,766,795
University of California.		
Los Angeles	355,000	231,868
Stanford University	90,215	0

<u>State/Recipient</u>	<u>Fiscal Year 1993 Actual</u>	<u>Fiscal Year 1994 Actual</u>
CALIFORNIA cont'd		
Beckman Research Institute of the City of Hope	0	200,000
Palo Alto Medical Foundation	200,000	0
The Salk Institute for Biological Studies	210,000	100,000
The Scripps Research Institute	0	100,000
DNA Plant Technologies, Inc.	130,000	0
Timothy R. Collier	0	80,000
Michael B. Cooley	0	80,000
Vincent M. Eckhart	61,400	0
Sheila M. Colby	82,000	0
Helga L. George	0	80,000
Paul J. Ode	0	80,000
Diane Wagner	0	77,800
USDA, ARS Albany, California	0	648,500
USDA, ARS Pacific West Area	410,000	0
USDA, Forest Service, Berkeley	0	570,000
USDA, Forest Service, Pacific SW Forest & Range Expt. Station	423,000	0
COLORADO		
Colorado State University	518,000	795,000
University of Denver	170,000	0
University of Colorado, Boulder	0	285,000
University of Colorado Health Sciences Center, Denver	263,000	220,000
Xenometrix, Inc.	250,000	0
USDA, ARS Northern Plains Area	294,065	214,364
USDA, ARS, Fort Collins	0	6,000
USDA, Forest Service	0	54,570
USDA, Forest Service, Ft. Collins	0	147,360
Rob R. Ramey	0	80,000
Adele M. Turzillo	0	80,000
CONNECTICUT		
Connecticut Agricultural Experiment Station	340,000	143,947
University of Connecticut, Storrs	885,342	725,782
Yale University	120,000	145,000
Yale University, School of Medicine	0	206,000
Wesleyan University	169,520	0
DELAWARE		
E. I. de Pont de Nemours & Co	0	50,000
University of Delaware	650,490	318,406

<u>State/Recipient</u>	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
DISTRICT OF COLUMBIA		
Carnegie Institution of Washington	205.200	100.000
Howard University	0	57,000
USDA, ERS, ATAD	118.720	0
FLORIDA		
Florida A&M University	0	49,750
Florida State University	115.000	0
University of Florida	2,369,276	1,794,453
University of South Florida	60.000	110,000
Florida International University	90.000	0
Tampa Bay Research Institute	232.558	130.000
University of Miami	0	130,000
GEORGIA		
Agnes Scott College	0	23.156
University of Georgia Research Foundation	1,945,580	1,168,344
Clark Atlanta University	0	68,130
USDA, ARS South Atlantic Area	868.000	797,361
Emory University	78.527	0
Institute of Paper Science & Technology	88.000	0
HAWAII		
University of Hawaii	439.378	313,807
IDAHO		
University of Idaho	971,559	597,711
ILLINOIS		
Illinois State University	199,710	0
Western Illinois University	49,994	0
Northern Illinois University	130,000	0
Northwestern University	50,000	340,000
Southern University	0	36,993
University of Illinois, Chicago	248,000	72,000
University of Illinois, Urbana	2,090,117	2,909,127
USDA, ARS Mid-West Area	735,481	0
USDA-ARS	0	2,397,996
William Brown	0	80,000
INDIANA		
Methodist Hospital of Indiana, Inc.	92,000	0
Indiana University	80,000	90,000
Indiana State University	0	36,993
Purdue University	1,923,051	2,825,925
University of Notre Dame	0	120,000

<u>State/Recipient</u>	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
IOWA		
Iowa State University	1,618,755	1,590,495
University of Iowa	450,000	384,000
Anne Kimber	0	80,000
KANSAS		
Kansas State University	1,106,560	1,003,260
University of Kansas	85,000	160,000
Eric Maurer	0	80,000
KENTUCKY		
Bellarmino College	0	44,814
Kentucky State University	0	45,000
University of Kentucky	996,438	1,206,206
Murray State University	43,120	0
LOUISIANA		
Louisiana State University		
A&M College	609,000	715,679
Northwestern State University	49,704	0
Tulane University	0	205,000
University of Southwestern Louisiana	149,930	0
USDA, ARS	0	90,000
USDA, Forest Service Southern Forest Experiment Station	410,000	0
MAINE		
University of Maine	388,940	360,483
MARYLAND		
University of Maryland, College Park	566,000	736,264
Towson State University	0	49,521
American Society of Tropical Veterinary Medicine	5,000	0
Federation of American Societies of Experimental Biology	0	15,425
Johns Hopkins University	90,000	0
American Society for Cell Biology	5,000	0
The Genetics Society of America	0	1,402
USDA, ARS Beltsville Area	1,150,642	438,000
Advanced Bioscience Lab, Inc.	154,084	0
University of Maryland, Baltimore	212,000	152,000
Elena del Campillo	0	90,000
Eric W. Riddick	0	80,000
MASSACHUSETTS		
University of Massachusetts, Amherst	1,081,165	939,154

<u>State/Recipient</u>	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
MASSACHUSETTS cont'd		
University of Massachusetts.		
Dartmouth	0	55,000
Northeastern University	0	180,000
Amherst College	0	156,553
Massachusetts Institute of Technology	151,640	75,000
University of Massachusetts Medical School	248,063	0
Tufts University	129,718	713,922
Harvard University	87,160	120,000
Beth Israel Hospital, Boston	0	179,000
Boston University	0	100,000
Boston University School of Medicine	0	73,000
Massachusetts General Hospital	305,000	155,000
Worcester Polytechnic Institute	50,000	0
Karen L. Houseknecht	0	80,000
Joel A. Kreps	0	80,000
MICHIGAN		
Michigan State University	1,974,038	2,490,198
Michigan Technological University	0	10,109
University of Detroit, Mercy	0	50,000
University of Michigan	249,070	348,000
Herbert H. & Grace A. Dow Foundation	180,000	0
Ernest J. DeRocher	0	80,000
Jennifer L. Stoyenoff	69,607	0
Carol R. Buell	77,000	0
MINNESOTA		
University of Minnesota	2,054,387	1,567,431
Mankato University	0	61,698
St. Cloud State University	50,000	0
Robert G. Gregerson	80,000	0
John J. Weiland	0	80,000
MISSISSIPPI		
Mississippi State University	365,881	484,657
University of Mississippi	0	105,000
University of Southern Mississippi	334,865	57,081
MISSOURI		
St. Louis University	0	205,000
Southeast Missouri State University	0	33,456

	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
<u>State/Recipient</u>		
MISSOURI cont'd		
University of Missouri, Columbia	1,679,210	1,344,112
University of Missouri, St. Louis	0	125,000
Washington University	111,757	808,000
Reginald J. Gaudino	0	80,000
MONTANA		
Montana State University	637,509	1,104,120
University of Montana	90,000	0
NEBRASKA		
University of Nebraska	1,337,408	1,576,986
NEVADA		
Desert Research Institute	0	107,000
University of Nevada	220,052	499,647
NEW HAMPSHIRE		
University of New Hampshire	497,459	303,018
Dartmouth College	60,000	250,000
NEW HAMPSHIRE cont'd		
David J. Wastenbergl	0	80,000
NEW JERSEY		
New Jersey Medical School	0	80,000
Rutgers, The State University	704,816	1,323,237
NEW MEXICO		
New Mexico State University	404,013	535,000
University of New Mexico	0	8,575
NEW YORK		
Cornell University	4,275,617	3,448,128
State University of New York, Albany	684,000	906,450
State University of New York, Buffalo	351,138	50,000
State University of New York, Stony Brook	0	417,000
Columbia University	0	195,000
University of Rochester	53,000	281,700
Cold Spring Harbor Laboratory	0	397,000
Boyce Thompson Institute	725,873	100,000
Rensselaer Polytechnic	80,000	0
New York University	70,000	0
Siena College	120,000	0
State University of Binghamton	100,000	0
New York Botanical Garden	100,000	0
Roswell Park Division & New York State Dept. of Health	132,500	0
Rebecca W. Doerge	0	80,000

<u>State/Recipient</u>	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
NEW YORK cont'd		
Tama C. Fox	0	80,000
Lawrence J. Zwiebel	0	80,000
Gernot G. Presting	0	80,000
NORTH CAROLINA		
Bowman Gray School of Medicine of Wake Forest University	0	102,000
North Carolina State University	1,690,818	3,106,073
University of North Carolina, Chapel Hill	796,460	100,000
University of North Carolina, Charlotte	0	50,000
University of North Carolina, Greensboro	0	24,319
Western Carolina University	0	90,000
Duke University	614,000	562,136
NORTH DAKOTA		
North Dakota State University	1,251,011	868,725
University of North Dakota	100,000	110,000
OHIO		
Bowling Green State University	0	94,187
Ohio State University Research Foundation	1,447,825	974,582
Ohio University	110,000	219,000
Case Western Reserve University	112,000	250,000
Miami University	425,000	92,644
University of Cincinnati	0	130,000
OKLAHOMA		
Oklahoma State University	602,758	812,695
University of Oklahoma	125,000	160,000
Langston University	7,500	0
University of Tulsa	48,911	43,715
University of Central Oklahoma	48,990	0
OREGON		
Oregon State University	949,341	2,103,430
University of Oregon	340,000	120,000
Oregon Health Science Institute	150,000	0
USDA, Forest Service, Portland	0	400,000
PENNSYLVANIA		
Bloomsburg University	0	57,900
Bucknell University	0	50,000
Pennsylvania State University	2,989,581	1,928,637
Duquesne University	239,969	90,000
Thomas Jefferson University	0	160,000

<u>State/Recipient</u>	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
PENNSYLVANIA cont'd		
University of Pennsylvania, Philadelphia	484,327	150,000
USDA, ARS North Atlantic Area	545,000	220,000
Millersville University of Pennsylvania	49,875	0
West Chester University of Pennsylvania	49,960	0
Drexel University	90,000	0
Lehigh University	95,000	0
PUERTO RICO		
University of Puerto Rico	0	130,000
RHODE ISLAND		
Gordon Research Conference	49,000	0
University of Rhode Island	285,318	664,256
Brown University	150,000	0
Karen M. Warner	0	80,000
SOUTH CAROLINA		
University of South Carolina	161,012	340,885
Clemson University	568,280	384,977
Medical University of South Carolina	122,009	0
SOUTH DAKOTA		
South Dakota State University	360,981	437,230
Augustana College	68,472	0
University of South Dakota	100,000	0
TENNESSEE		
East Tennessee State University	0	17,945
Memphis State University	0	80,400
Vanderbilt University	110,000	275,264
University of Tennessee, Knoxville	764,783	959,056
University of Tennessee, Chattanooga	0	34,017
James R. Strickland	0	80,000
TEXAS		
Texas Tech University	575,538	122,000
University of Texas, Austin	200,000	467,000
Southwest Texas State University	0	7,500
Texas Tech University Health Science Center	215,000	0
Baylor College of Medicine	370,000	367,000
Rice University	100,000	0

<u>State/Recipient</u>	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
TEXAS cont'd		
University of Texas Southwestern Medical Center at Dallas	237,000	0
University of Texas Medical, Galveston	0	130,000
University of Texas Health Center, Houston	0	90,000
University of North Texas	0	90,000
Texas A&M University Research Foundation	4,085,158	3,241,595
Texas A&M University, Kingsville	0	101,791
Southern Methodist University	70,000	70,000
Trinity University	59,930	0
USDA, ARS Southern Plains Area	100,000	226,900
University of Texas M.D. Anderson Cancer Center	212,209	0
Jeffrey E. Herrick	0	66,500
Andrew J. Wood	0	73,700
UTAH		
Utah State University	110,000	350,000
University of Utah	230,000	180,000
Brigham Young University	120,000	0
VERMONT		
University of Vermont	568,300	121,070
Lyndon State College	49,770	0
VIRGINIA		
Virginia Polytechnic Institute & State University	893,980	1,157,119
James Madison University	175,000	49,673
Old Dominion University	0	176,705
Virginia Commonwealth University	123,781	0
WASHINGTON		
Children's Hospital & Medical Center	0	130,754
Washington State University	1,737,003	2,757,600
University of Washington	916,744	1,797,200
NW Fisheries Science Center, Coastal Zone & Estuarine Studies	222,000	0
Thomas J. Savage	0	80,000
WEST VIRGINIA		
West Virginia University	910,502	197,001
WISCONSIN		
Marquette University	0	90,000
University of Wisconsin, Madison	4,296,805	4,242,517

<u>State/Recipient</u>	Fiscal Year 1993 <u>Actual</u>	Fiscal Year 1994 <u>Actual</u>
WISCONSIN cont'd		
University of Wisconsin, Oshkosh	0	100,000
University of Wisconsin, Parkside	0	140,000
Forest Service, Forest Products Laboratory	311,333	0
USDA, Forest Service, Madison	0	365,179
Medical College of Wisconsin	165,000	0
University of Wisconsin, Milwaukee	74,692	0
Stan T. Lebow	0	79,728
WYOMING		
University of Wyoming	579,429	571,853
Total	<u>91,814,480</u>	<u>96,631,441</u>
Federal administration (4%)	3,900,000	4,122,840
Small Business Act	1,404,000	1,484,222
Biotechnology Risk Assessment	381,520	357,121
Peer Panel Costs	<u>0</u>	<u>475,376</u>
Total	97,500,000	103,071,000

Question: Last year, the Committee continued its directive that 10 percent of the Competitive research grant funds be used for the USDA-EPSCoR program (Experimental Program to Stimulate Competitive Research). Please provide for the record a list of eligible States and funding levels awarded under this program for each of the past two fiscal years and a list of the States that will be eligible for the program in fiscal year 1995.

Answer: Eighteen States were eligible as USDA EPSCoR States, defined as States with an average funding level from the Department of Agriculture, National Research Initiative Competitive Grants Program no higher than the 38th percentile based on a 3-year rolling average. In addition to these 18 States in 1993, Nevada was also an USDA EPSCoR State in 1994. The States and the amount of funds awarded to each in fiscal years 1993 and 1994 were as follows:

COOPERATIVE STATE RESEARCH EDUCATION, AND EXTENSION SERVICE
National Research Initiative
Funds Awarded to USDA EPSCoR States

<u>State</u>	<u>FY 1993</u>	<u>FY 1994</u>
Alaska	\$781,022	\$950,237
Arkansas	149,895	312,500
Connecticut	1,495,065	1,882,294
Delaware	650,490	368,406

<u>State</u>	<u>FY 1993</u>	<u>FY 1994</u>
Hawaii	439,378	313,807
Idaho	971,559	597,711
Maine	388,940	360,483
Mississippi	700,746	646,738
Montana	727,509	1,104,120
Nevada	0	606,647
New Hampshire	557,459	633,018
New Mexico	404,013	543,575
North Dakota	1,351,011	978,725
Rhode Island	484,318	744,256
South Carolina	851,301	725,862
South Dakota	529,453	437,230
Vermont	618,070	121,070
West Virginia	910,502	197,001
Wyoming	<u>579,429</u>	<u>571,853</u>
TOTAL	12,590,160	12,095,533

The USDA EPSCoR States for 1995 include the 19 States identified as USDA EPSCoR States in 1994, with the addition of Puerto Rico.

Question: In fiscal year 1994, \$2.5 million of the National Research Initiative Competitive Grants Program funding was directed by the Secretary of Agriculture for the U.S.-Israel Binational Agricultural Research and Development --BARD-- program. For fiscal year 1995, an additional \$2.5 million is to be directed to BARD in the same manner it was provided for fiscal year 1994. Have these fiscal year 1995 funds been allocated to BARD? Has the funding been provided through ARS as it was in fiscal year 1994? What funding is included in the fiscal year 1996 request for the BARD program?

Answer: The \$2.5 million in funds for BARD from the 1995 appropriation to the National Research Initiative Competitive Grants Program have been allocated for BARD as directed. The \$2.5 million directed by the Secretary of Agriculture to BARD in 1994 was provided to BARD projects by the former Cooperative State Research Service, now the Cooperative State Research, Education, and Extension Service, through a special grant authority that allows the Secretary of Agriculture to award funds to Land Grant Universities for research. Awards were made to Land Grant Universities in support of the U.S. side of BARD projects up to the amount allocated from the National Research Initiative for BARD. Whether the funds allocated for BARD in 1995 will be provided through the Agricultural Research Service or as a special grant through the Cooperative State Research, Education, and Extension Service is still under consideration. No funding for BARD has been included in the fiscal year 1996 request.

SPECIAL RESEARCH/FEDERAL ADMINISTRATION GRANTS

Question: Would you please provide a description of each of the special research and federal administration grants funded for fiscal year 1995, including the funding --both federal and non-federal-- which has been provided to date, the research institutions carrying out the work, and the estimated completion date of the project.

Answer: [The information follows:]

AFLATOXIN RESEARCH, ILLINOIS

Past work on this problem has involved screening corn germplasm for resistance to aflatoxin production, testing of *Aspergillus flavus*-inhibiting chemicals, identifying fungus-inhibiting enzymes, developing recombinant genetics methods, and tissue culture/plant regeneration studies. Because aflatoxins are potent carcinogens with other toxic properties, there are potential health risks for humans and farm animals, wherever they may be exposed to toxin- contaminated corn. Although aflatoxin contamination is most serious in the southeastern United States, outbreaks have occurred in the upper Midwest. Thus there are regional and national needs for this research.

The original goal of this research was the reduction of aflatoxin production in corn. Recent accomplishments include identification of corn germplasm for resistance to ear infection by the fungus, and to aflatoxin production. Tissue culture was successfully developed as a means for evaluation of corn callus and the fungus. Development of an effective transformation system for producing corn germplasm with elevated pathogen resistance was accomplished.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, \$87,000; fiscal year 1991, \$131,000; and fiscal years 1992-1993, \$134,000 per year, fiscal year 1994, \$126,000; and fiscal year 1995, \$113,000. A total of \$725,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$103,483 state appropriations, and \$115,500 miscellaneous in 1991; \$5,470 miscellaneous in 1992; \$40,269 state appropriations, \$898 product sales, and \$38,777 miscellaneous in 1993; and \$49,000 in 1994.

This research is being conducted at the University of Illinois. The researchers anticipate that the work may be completed in fiscal year 1995.

AGRICULTURAL DIVERSIFICATION AND SPECIALTY CROPS, HAWAII

This ongoing project has focused in past years on developing a taro industry in Hawaii. Pilot plant operations have been optimized and taro flour will be produced and distributed to cooperating food processors. Work continues with processing cooperators to manufacturer cookies, crackers, desserts, rice and noodles. The significance of this effort is supported by the large number of people who are sensitive to certain foods. Taro has been a staple for centuries in many countries and offers an alternative to many conventional foods that pose health problems for U.S. consumers.

This project has expanded beyond taro to include development of wet-packs for pineapple products. This method of packaging allows for entry in new markets, e.g. the Department of Defense -- DoD-- "Meal, Ready-to-eat, Individual" foods. DoD is required to purchase from domestic supplies if available.

Peach palm will also be developed as an alternative food to provide a source of hearts of palm for gourmet restaurants and up-scale consumers. Several hundred acres can be grown to supply a substantial share of the market in Hawaii and on the mainland. Commercially viable alternatives for sugar and pineapple allow new or replacement employment in distressed areas of Hawaii. New taro flour products offer new nutritious and safe foods for people with allergies.

Grants have been awarded from funds appropriated as follows: fiscal years 1988 and 1989, \$156,000 per year; fiscal years 1990 through 1993, \$154,000 per year; fiscal year 1994, \$145,000; and fiscal year 1995, \$131,000. A total of \$1,204,000 has been appropriated

Non-federal funds are not provided for this research. The University of Hawaii provides in-kind support in the form of laboratory and office facilities, equipment and equipment maintenance and administrative support services: \$866,513 in fiscal year 1991; \$68,503 in fiscal year 1992; \$75,165 in fiscal year 1993 and \$74,663 in fiscal year 1994. In addition, private in-kind support for large scale white taro production and land for a taro flour plant has been secured from Industry.

Research is being conducted at the University of Hawaii's Institute of Tropical Agriculture and Human Resources. It is anticipated that the taro phase of the project will be completed in 1995. The next phase of the project has been initiated through development work for wet-packs for pineapple and hearts of --peach-- palm.

AGRICULTURAL MANAGEMENT SYSTEMS, MASSACHUSETTS

The Massachusetts Agricultural Experiment Station Agricultural Management Systems Program serves as a New England regional center for the development of alternative agricultural management systems which are sustainable, biologically based and economically viable. In recent years, the potential dangers to human health and environmental ecology of excessive or improper usage of pesticides have become better known, and there is a generally recognized need to be more judicious in the use of chemicals. Also, public concern about food safety is greater than ever. Reduced use of pesticides may reduce risks of environmental pollution and danger to human health. The strategies known collectively as integrated pest management --IPM-- are widely regarded as the most promising means of accomplishing reduced use without causing undue economic hardship for farmers and consumers. The University of Massachusetts is recognized as a leader in innovative and effective IPM programs nationally.

The original and continued goals of this research is to continue development of research-based strategies for pest management, develop new technologies for pest management that use natural enemies of pests and/or use genetically engineered microorganisms, and improve techniques for pest population monitoring. Accomplishments documented in fiscal year 1994 are: apple - based on small field plot research, 12 commercial orchard blocks between five and nine acres in size demonstrated a biologically-intensive management program in which pesticide use was reduced 20 percent for miticides and 26 percent for fungicides after mid June, compared to nearby chemically-dependent blocks; cranberry - a cranberry fruitworm monitoring technique reduced fruitworm sprays between 50 to 100 percent on experimental bog sections; sweet corn - the use of the biological pesticide Bt has been demonstrated on small field plots and has been determined by grower cooperators to provide early season protection of European corn borer with 97 percent clean fruit. Also, it was determined on 12 farms that the use of a hairy vetch cover crop reduced nitrogen application an average of 65 pounds per acre. In tomato a two year demonstration of the TOM-CAST disease prediction system resulted in 40 percent reduction of fungicide use with yields comparable to conventional practices.

This program began in fiscal year 1991. Grants have been awarded from funds appropriated as follows: fiscal year 1991, \$275,000; fiscal years 1992-1993, \$261,000 per year; fiscal year 1994, \$245,000; and fiscal year 1995, \$221,000. A total of \$1,263,000 has been appropriated for this work.

Fiscal year 1995 non-federal funds from the Massachusetts Department of Food and Agriculture, total \$134,000. Similar support was received for fiscal years 1991-1994.

This research is underway at the Massachusetts Agricultural Experiment Station in the University of Massachusetts, Amherst. The researchers anticipate that the work may be completed in fiscal year 1995.

ALFALFA RESEARCH, KANSAS

This project was designed to improve utilization of alfalfa protein for beef cattle through coordinated research studies of plant breeding, forage management and animal breeding. The stated need and the primary focus of this research deals with the local Kansas situation. However, the anticipated results from these studies will have application nationally wherever alfalfa is grown and/or used.

The original goal of this research was the development of improved cultivars, and production/harvest/storage systems that will result in improved utilization of alfalfa protein by beef cattle. To date the work has focused on experimental evaluation techniques for assessing protein loss and changes in stored alfalfa, the evaluation of genetic control of protein degradability and the conduct of animal feeding studies to compare alfalfa supplement with grain and low quality forage ration.

The work supported by this grant began in fiscal year 1992 and appropriations for fiscal years 1992 and 1993 were \$125,000 per year; fiscal year 1994, \$118,000; and fiscal year 1995, \$106,000. A total of \$474,000 has been appropriated.

The nonfederal funds provided for this grant were as follows: \$152,679 state appropriations, \$12,128 product sales and \$1,128 other nonfederal in fiscal year 1992 and \$215,361 state appropriations, \$28,784 product sales, \$3,154 nonfederal in fiscal year 1993 and \$17,499 state appropriation in 1994.

Research is being conducted at Kansas State University. The university researchers anticipate that work may be completed in fiscal year 1997.

ALTERNATIVE CROPPING SYSTEMS IN THE SOUTHEAST

The South Carolina, North Carolina and Georgia Agricultural Experiment Stations have collaborated in a joint research project, to study the economic and biological feasibility of expanded production of horticultural crops in the southeastern United States. The regional need for this research is to evaluate the potential of alternative crops to improve the economic competitiveness of small farms in the tri-state area, and to develop production systems for those that appear to be promising.

The original goal of this work was to find alternative high value crops that could increase income necessary for the continued survival of the relatively small size farms in the Southeast United States. The work has evaluated important production management practices, harvest and handling methods and assessed market windows for several horticultural crops including melons, tomatoes, greenbeans and peppers.

Work supported by this grant began in fiscal year 1985 and appropriations are as follows: fiscal year 1985, \$300,000; fiscal years 1986-1989, \$285,000 per year; fiscal year 1990, \$281,000; fiscal year 1991, \$277,000; fiscal years 1992-1993, \$278,000 per year; fiscal year 1994, \$261,000; and fiscal year 1995, \$235,000. The total to date is \$3,050,000.

The nonfederal funds and sources provided for this grant were as follows: \$525,053 state appropriations in 1991; \$702,834 state appropriations in 1992, \$388,148 state appropriations in 1993, and \$849,391 state appropriations.

The work is being carried out at the South Carolina, North Carolina and Georgia State Agricultural Experiment Stations. The university researchers have estimated that this work would be completed in fiscal year 1995.

ALTERNATIVE CROPS, NORTH DAKOTA

The original goal of this research is to introduce, evaluate and test new crops which will broaden the economic diversity of crops grown in North Dakota. The primary emphasis is to find new crops with non-food uses and create value added products. In this investigation of alternative crops, plant species studied were amaranth, fenugreek, coriander, sesame, camelina, and quinoa. Measurements of yield industrial products such as squalene and tocotrienols, pectin, starch size and enzymatic activity were made. Also, preliminary marketing studies on flax seed utilization in

human foods were completed. Other university researchers studied anthocyanins from purple-hulled sunflower, enzymatic esterification of pure linoleic acid in supercritical carbon dioxide, conversion of erucic acid to brassylic and pelargonic acids and foam stabilizing effects in waterborne alkyd polymers based on linseed. Amaranth starch was tested for qualities as a sizing material for paper, also model systems of amaranth starch gels were characterized using differential scanning calorimetry, mechanical compression and x-ray diffraction.

Regionally, the central northern temperate area of the nation is dominated by several monoculture crops, e.g. corn, wheat, and soybeans, which could eventually lead to non-sustainability due to diseases, erosion and complete dependence upon specific market vagaries. North Dakota is a leadership state in the development and breeding of new and alternative crops, e.g. dry edible beans, sunflower, crambe and northern adapted soybeans. These efforts have contributed significantly to USDA's ongoing programs to develop renewable feedstocks to support non-renewable materials. Concurrently, processing of agricultural products in North Dakota impacts the growth of rural-based businesses.

Appropriations by fiscal year are as follows: 1990, \$494,000; 1991, \$497,000; 1992 and 1993, \$700,000 per year; 1994, \$658,000 and in fiscal year 1995, \$592,000. A total of \$3,641,000 has been appropriated.

In fiscal year 1991, \$10,170 was provided by state appropriations. In fiscal year 1992, \$29,158, was also provided by state appropriations and self-generated funds. In fiscal year 1993, \$30,084, was provided by state appropriations. In fiscal year 1994, \$161,628 was provided by state funds, \$3,189 provided by industry and \$9,020 provided by other sources, totalling \$174,417.

The work is conducted on the campus of North Dakota State University and at the Carrington Research and Extension Center, Carrington, North Dakota. The breeding and selection of new crops and utilization of such crops in North Dakota is an ongoing process. It began with statehood and the establishment of the North Dakota Agricultural Experiment Station in 1890 and could continue indefinitely.

ALTERNATIVE CROPS FOR ARID LANDS, TEXAS

This grant is to develop the two most abundant plants in southwestern United States, i.e. mesquite and cactus, into commercial crops through a combination of applied research and market development. The semi-arid regions of the United States

that border with Mexico are Texas, New Mexico, Arizona, and California. These states have some of the highest unemployment rates and lowest incomes in the United States. The two most abundant plant species in this region are prickly pear cactus and mesquite. By working with Mexican researchers, this grant will help to stabilize the economic situation of rural poor in Mexico and the United States. The United Nations and the International Union of Forestry Research Organizations --IUFRO-- --World Forestry Congress-- have paid the expenses of the principal researcher to assist with a U.N. Food and Agriculture Organization -- --UN/FAO-- cactus network and with training of developing country scientists. This research group is the only center in the United States developing these plants as crops.

Fiscal year 1994 was the first year of funding for this grant and \$94,000 was appropriated. In fiscal year 1995, \$85,000 was appropriated. A total of \$179,000 has been appropriated. Similar work has been funded since August 1985. In fiscal year 1994, \$43,215, was being provided by the Texas Legislature.

The work is being conducted by Texas A&M University, Kingsville, Texas. Significant but small Texas cactus and mesquite industries now exist. Transformation of these small industries into medium industries and transfer of the arid technologies to low rainfall areas of the midwestern and southeastern United States will carry on well into the next century.

ALTERNATIVE MARINE AND FRESHWATER SPECIES, MISSISSIPPI

The research has focused on the culture of hybrid striped bass, prawns, and crawfish. Nutritional requirements and alternative management strategies for these species have been evaluated. Economic models based on these management strategies and species have been refined to assist potential producers in evaluating alternative opportunities in commercial aquaculture. The principal researcher indicates that as the aquaculture industry continues to grow it is extremely important to consider alternative species for culture in order to help the industry diversify. Diversification is of benefit to both the producer and consumer of aquaculture products. Research generated from this grant should lead to alternative production systems that can have national, regional and local impact.

The work supported by this grant began in fiscal year 1991 and the appropriations for fiscal years 1991-1993 were \$275,000 per year, and \$258,000 in fiscal year 1994, and \$308,000 in fiscal year 1995. A total of \$1,391,000 has been appropriated.

The university reports a total of \$332,091 of non-federal funding to support research carried under this program for fiscal years 1991-1994. The primary source of the non-federal funding was from state sources.

Research is being conducted at Mississippi State University. The researchers anticipate that the specific research outlined in the current proposal will be completed in fiscal year 1996.

ALTERNATIVE PEST CONTROL. ARKANSAS

This grant supports a research center which is discovering and developing biological control agents and ways of using biological control agents to control pests of insects, nematodes, weeds, and plant diseases. The program includes: collecting, isolating, and identifying candidate biological control agents; evaluating the effectiveness of biological control agents and mechanisms that provide resistance to pests; developing procedures for formulation and application of biological control agents useful to private sector technology transfer and commercialization; evaluating field performance of implemented alternative controls and strategies; and assessing the environmental impact of conventional pesticides. This research center has a strong focus on commercialization of these unique pest control products.

The funds appropriated to the Alternative Pest Control Center support a leading team of scientists who are developing alternative pest controls. This critical mass of scientific leadership provides a point of focus for this kind of research and fosters participation and collaboration with scientists pursuing like kinds of research and development nationwide. The breakthroughs in commercialization of biological control agents are quickly transmitted in scientific writings and symposia and are infused in on-going research throughout the nation. The target pests for this work in Arkansas are also pests of cotton, rice, wheat, soybean, forage fescues, apple, grape and several vegetable crops.

This project has the goal of development of pest control technology that provides an alternative to conventional, broad spectrum pesticides. The focus of the center remains on development of biological control practices, but has put increased emphasis in developing rice and other crops and mulches that suppress growth and development of weeds and mortality of weed seeds. There have been many accomplishments. Examples are Kentucky 31, a turf fescue was found to inhibit weedy plants. Fungi have been found to control cotton aphid and are being developed for commercial use. The center has developed a way to mass produce a predator insect that can be used to control aphids.

thrips, mites, and other small pests in many crops including cotton, corn, vegetables, greenhouses, and urban landscapes. Research has provided a protocol for storing the biological control agents, so as to create shelf-life in the product. This is an important advancement commercialization of biological control agents.

Grants have been awarded from funds appropriated as follows: Fiscal year 1989, \$1,400,000; fiscal year 1990, \$1,382,000; fiscal year 1991, \$1,391,000; fiscal years 1992-1993, \$1,400,000 per year; fiscal year 1994, \$1,316,000, and fiscal year 1995, \$1,184,000. A total of \$9,473,000 has been allocated.

Arkansas provided \$945,151 in support for the Alternative Pest Control Center from State appropriations, industry contracts, and other miscellaneous sources during 1991 and 1992. For 1993, \$20,000 is provided and \$300,000 for 1994.

The research is being conducted at the University of Arkansas and in cropping systems in Arkansas. The fiscal year 1995 proposal indicates that the research will be completed in April, 1999.

ANIMAL SCIENCE FOOD SAFETY CONSORTIUM

The research goal is to enhance the safety of red meat and poultry products for human consumption. Research has focused on accomplishing six objectives: (1) develop rapid detection techniques of pathogenic organisms and toxic chemicals for use by the red meat and poultry production-marketing system; (2) devise a statistical framework from which to develop tolerance levels for these hazardous substances; (3) identify effective interdiction points and develop methods to prevent or reduce substance presence; (4) develop monitoring techniques and methodologies to detect and estimate the human health risk of these contaminants; (5) develop technologies to reduce hazards and enhance quality of animal food products to complement the development of Hazard Analysis Critical Control Point programs by USDA; and (6) estimate benefits and costs and risks associated with interdiction alternatives. The consortium's researchers have focused their efforts primarily on the first, third, fifth, and sixth objectives. A safer national meat product food supply could reduce large economic losses --\$4 to \$7 billion a year-- as a result of lost productivity and wages and medical treatment of victims. Safer products will also find greater acceptance in global markets and, therefore, contribute to increased meat product exports and rural economic growth.

Major accomplishments this past year by the University of Arkansas include development of a procedure to estimate the

pathogenicity of Listeria monocytogenes and E. coli H157:07 that will be useful for risk estimation purposes; demonstration that quaternary ammonium compounds, specifically cetylpyridinium chloride, reduce the binding of bacteria to poultry skin and kill bacteria in process water; development of an electropasteurization process that significantly reduces the level of pathogens in poultry chill water; and demonstration of the effectiveness of low levels of ozone to control pathogens and spoilage organisms in poultry chill water.

Major accomplishments this past year by Iowa State include development and application of DNA probes to find *Arcobacter*, a genus of bacteria first described in 1991, on pork products. This pathogen was found in the pilot study. The study was extended to poultry plants where the pathogen also was found. However, *Arcobacter* can be controlled by heating and irradiation treatment. A rapid, 30 minute test for *Salmonella* bacteria was developed to determine the presence of this pathogen. The technique can be used during processing without carcass invasion or slowing line-speed. An ELISA serum assay test was developed to test live hogs for *Salmonella*. Application will enable detection and removal of infected pigs from herds prior to slaughter.

Kansas State University has demonstrated under commercial conditions that electronic identification systems for beef cattle are feasible from an implant retention, operational, and retrievability standpoint; has developed analytical procedures to detect mycotoxin fumonisin and organophosphate pesticide contaminants in animal tissue; has demonstrated that carcass treatment practices such as washing and trimming need to be supplemented with treatments of cuts after final handling to be effective in the removal of pathogens; and has developed enrichment techniques for the simultaneous recovery of different pathogens in a single test.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$1,400,000; fiscal year 1990, \$1,678,000; fiscal year 1991, \$1,845,000; fiscal years 1992-1993, \$1,942,000 per year; fiscal year 1994, \$1,825,000; and fiscal year 1995, \$1,743,000. A total of \$12,375,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$1,313,653 State appropriations, \$2,959 product sales, \$35,600 industry, and \$259,735 miscellaneous for a total of \$1,611,947 in 1991; \$1,270,835 State appropriations, \$10,129 product sales, \$90,505 industry, and \$267,590 miscellaneous for a total of \$1,639,059 in 1992; \$1,334,680 State appropriations, \$1,365 product sales, \$33,800 industry, and \$356,308 miscellaneous

for a total of \$1,726,153 in 1993; \$1,911,389 State appropriations, \$192,834 industry, and \$200,000 miscellaneous for a total of \$2,304,223 in 1994; and \$1,761,290 State appropriations, \$221,970 industry, and \$91,885 miscellaneous for a total of \$2,075,145 in 1995.

Research is being conducted by a consortium composed of the University of Arkansas at Fayetteville, the University of Arkansas for Medical Sciences at Little Rock, Kansas State University, and Iowa State University. The current program of research outlined under the consortium's recently revised strategic research plan should be completed in 1999.

AQUACULTURE, CONNECTICUT

The investigators indicate that the proposed research will focus on oyster diseases. Protocols and health management strategies will be developed to assist the oyster industry in maintaining sustainable production systems. The overall research goal is to improve the health management of important commercial production systems for oysters.

The work supported by his grant begins in fiscal year 1995 and the appropriation for fiscal year 1995 is \$181,000. The research supported by this grant begins in fiscal year 1995. The university anticipates significant funding from non-federal sources, primarily state sources.

Research will be conducted at the University of Connecticut in cooperation with the State of Connecticut. The researchers anticipate that work may be completed in fiscal year 1997.

AQUACULTURE, ILLINOIS

Researchers are developing and evaluating closed system technology for application to commercial aquaculture. System design analysis has been completed and commercial trials and pilot studies are underway. The development of alternative aquaculture production systems, such as closed recirculating systems, would reduce demands for water and would provide for greater control over production in aquacultural systems. Closed systems could be established independent of climatic condition in any region of the country. These systems also offer greater opportunity to manage aquacultural waste and reduce environmental impact.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992-1993 was \$200,000 per year;

fiscal year 1994, \$188,000; and fiscal year 1995, \$169,000. A total of \$757,000 has been appropriated.

The university estimates that non-federal funding for this program is as follows: in fiscal year 1992, \$370,000; in fiscal year 1993, \$126,389; and in fiscal year 1994, \$191,789. The primary source of funding is from the state with gifts and grants accounting for the remainder. This estimate does not include substantial in-kind contributions from industry as this program conducts cooperative research with commercial producers.

Research is being conducted at Illinois State University at Normal, Illinois, through a subcontract with the University of Illinois. The university researchers anticipate that work may be completed in fiscal year 1998.

AQUACULTURE, LOUISIANA

Research funded through this program focuses on the production of aquaculture species such as catfish, crawfish, hybrid striped bass, and redbird. The principal researcher indicates that there is a need to improve production efficiency in order to enhance the profitability and sustainability of the aquaculture industry. The research also addresses the issue of food safety and quality of farm-raised products.

The original goal of this research was to expand the technology base to enhance the development of aquaculture through a broad research program that addresses the needs of the industry. The university has completed studies in the area of fish nutrition, fish health, production management strategies, alternative species, seafood processing and broodstock development. Field testing in cooperation with commercial producers and extension education programs has accelerated the adoption of research findings by the industry.

Research to be conducted under this program will continue research initiated under the Aquaculture General program in fiscal years 1988 through 1991. The work supported by this new grant category began in fiscal year 1992 and the appropriation for fiscal years 1992-1993 was \$390,000 per year, \$367,000 in fiscal year 1994, and \$330,000 in fiscal year 1995, for a total of \$1,477,000.

The university estimates that non-federal funding for this program is as follows: in fiscal year 1991, \$310,051; in fiscal year 1992, \$266,857; in fiscal year 1993, \$249,320; and in fiscal year 1994, \$188,816. The primary source of this funding is from

state sources with minor contributions from industry and other non-federal sources.

Research is being conducted at Louisiana State University. The university researchers anticipate that work may be completed in fiscal year 1998.

AQUACULTURE RESEARCH, STONEVILLE, MISSISSIPPI

The primary objectives of this research are to improve practical feeds and feeding regimes, and to determine the causes of off-flavor in channel catfish and develop treatments to reduce the incidence of off-flavor in ponds. Additionally, scientists are evaluating the application of acoustical instrumentation in commercial aquaculture. The farmed-raised catfish industry accounts for over 55 percent of the total U.S. aquaculture industry. Research funded in this program is directed towards two of the most important research needs of the industry, off-flavor and improved feeds. Research findings have a direct impact on the profitability and sustainability of a significant segment of the domestic aquaculture industry.

The original goal of this research was to address the research needs of the catfish industry in the areas of water quality and nutrition. The research has led to an improved understanding of the sources and causes of off-flavor in commercial catfish ponds. Researchers are investigating the use of copper sulfate and other herbicides to control off-flavor. Research in the area of feeding strategies has led to improved diet formulation and feeding strategies. Scientists are currently evaluating three protein levels in catfish feeds under conditions that closely reflect commercial catfish ponds. Studies using acoustical instrumentation have demonstrated possible applications in commercial aquaculture. Researchers are designing and developing new instrumentation to determine fish size and number in aquaculture ponds.

Grants have been awarded from funds appropriated as follows: fiscal years 1980-81, \$150,000 per year; fiscal year 1982, \$240,000; fiscal years 1983-1984, \$270,000 per year; fiscal year 1985, \$420,000; fiscal years 1986-87, \$400,000 per year; fiscal year 1988, \$500,000; fiscal year 1989, \$588,000; fiscal year 1990, \$581,000; fiscal year 1991, \$600,000; fiscal years 1992-1993, \$700,000 per year; fiscal year 1994, \$658,000; and fiscal year 1995, \$592,000. A total of \$7,219,000 has been appropriated.

The university estimates a total of \$2,101,508 in non-federal funding to support this research for fiscal years 1991-1994. The

primary source of non-federal funding is from the state. Additional funding is provided from product sales, industry contributions, and other miscellaneous sources.

The grants have been awarded to the Mississippi Agricultural Experiment Station. All research is conducted at the Delta Branch Experiment Station, Stoneville, Mississippi. The acoustical research in aquaculture will be conducted in cooperation with the National Center for Physical Acoustics at the University of Mississippi. The researchers anticipate that the research will be completed in fiscal year 1998.

AQUATIC FOOD SAFETY AND QUALITY, FLORIDA

The proposed research is aimed at developing product and processing innovations to assure aquatic food products safety, and detection and monitoring techniques to assess aquatic product quality and safety and to detect harmful contaminants. The need for this research is based on persistent safety concerns for the public, commercial compliance with new regulatory mandates and support for cost-effective industry transition. Concerns for seafood and aquacultured product quality and safety pervade the critical issues for industry and regulatory transition in the 1990's. Aquatic products are now the lead commodity in the United States for adaptation of new regulatory mandates for Hazard Analysis and Critical Control Point --HACCP-- inspection. Concurrently, limited national resources and attempts to expand aquaculture have stimulated record-breaking aquatic product imports currently exceeding 60 percent of supply to meet current market demands.

The work supported by this grant begins in fiscal year 1995 with an appropriation of \$181,000.

The state of Florida and the industry each contributed \$800,000 toward the construction of an Aquatic Food Products Building to enhance the Aquatic Food Products Program at the University. In-kind, non-federal support in the amount of \$63,000 will be provided by Industry.

Research will be conducted at the University of Florida. The principal investigators anticipate that the proposed work supported by this grant will continue through December 1996.

ASIAN PRODUCTS LABORATORY, OREGON

The purpose of this grant is to expand foreign markets for U.S. produced wheat by equipping a laboratory at the Wheat

Marketing Center in Portland to conduct research on the attributes of wheat flour needed to produce noodles and noodle products acceptable to consumers in the rapidly growing Pacific Rim market. Collaborative arrangements with Asian millers will provide information on the attributes. Protocols will be developed and translated into foreign languages to facilitate use of domestic wheat flours by Asian millers. The laboratory should be completed in early 1995.

Canada and Australia have implemented research and production and processing strategies to improve their ability to compete for a larger share of the wheat flour market for noodles in Asian countries. This project may improve the ability of the Pacific Northwest region's wheat producers and exporters to compete in Asian markets against Canadian and Australian wheat producers.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$235,000, and the fiscal year 1995 appropriation is \$212,000. A total of \$447,000 has been appropriated.

The non-federal funds and sources estimated for this grant are as follows: \$88,517 State appropriations in 1994. No determination has been made for the non-federal matching amount for 1995.

The work is being carried out at the Wheat Marketing Center at Portland, Oregon. The researchers have not indicated when the project can be completed. Plans are to complete the third stage by mid-1997 with the fourth stage time requirement indefinite.

BABCOCK INSTITUTE FOR INTERNATIONAL DAIRY RESEARCH AND DEVELOPMENT

The Babcock Institute for International Dairy Research and Development was established with participation of the University of Wisconsin-Madison College of Agriculture and Life Sciences, School of Veterinary Medicine and the Cooperative Extension Division. The objective of the Babcock Institute is to link the U.S. dairy industry with the rest of the world through degree training, continuing education, technology transfer, adaptive research, scientific collaboration and market analysis. The need is to strengthen dairy industries around the world, to enhance international commercial and scientific collaborative opportunities for the U.S. dairy industry, and to draw upon global perspectives to build insight into the strategic planning of the U.S. dairy industry.

An initial activity was the development of multi-language extension materials about basic management techniques essential to optimize performance of U.S. germplasm overseas. Research on potential implications of NAFTA on the U.S. dairy industry was completed. A technical workshop on dairy grazing in New Zealand and the Midwest was organized and held in Madison during the fall of 1993. A technical workshop on Nutrient Management, Manure and the Dairy Industry: European Perspectives and Wisconsin's Challenges was held in Madison, Wisconsin during September, 1994.

Grants have been awarded from funds appropriated as follows: fiscal years 1992 and 1993, \$75,000 per year; fiscal year 1994, \$250,000; and fiscal year 1995, \$312,000. A total of \$712,000 has been appropriated.

During fiscal year 1992, \$13,145 of State funds were used to support this program and \$19,745 of State funds in fiscal year 1993 for a total of \$32,890 during the first two years of this research. Information is not yet available for fiscal year 1994.

Research is being conducted at the University of Wisconsin-Madison College of Agriculture and Life Sciences. The University researchers anticipate that work currently underway will be completed in June, 1995.

BEEF FAT CONTENT, IOWA

The overall goal of the project is to demonstrate the ability to implement and manage systems of cattle breeding and production targeted to specification beef markets. The research being conducted under this project has a national focus. The use of real-time ultrasound to measure body composition in live beef animals and in carcasses will be an integral part of ongoing national genetic improvement programs sponsored by beef breed associations. Trained ultrasound technicians will be collecting images from feedstock herds in just about every state and sending the information to the national association offices for processing. The same technology will also be used in beef packing facilities as an integral part of instrument grading systems where the quality of every animal will be objectively measured immediately after slaughter. This information will be used in pricing the product, and it will also be provided back to the producer.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal year 1991 was \$200,000. The fiscal years 1992-1993 appropriations were \$237,000 per year; for fiscal year 1994, \$223,000; and fiscal year 1995, \$201,000. A total of \$1,098,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$114,640 state appropriations and \$1,528 miscellaneous in 1991; \$123,441 state appropriations and \$4,433 miscellaneous in 1992; and \$69,732 state appropriations and \$5,599 miscellaneous in 1993.

Research is being conducted at Iowa State University, Ames, Iowa. The university researchers anticipate that work may be completed in fiscal year 1995.

BIODIESEL RESEARCH, MISSOURI

Research on biodiesel involves examining the feasibility of producing biodiesel and other higher value oilseed crops in community-based plants in Missouri. The oilseed plants and the cropping system are canola, rapeseed, and sunflowers. Coproducts from the diesel production are also being developed.

Although the initial work is being done in Missouri, the results from these studies are transferable nationwide. These results may provide the agricultural community with alternative crops, additional marketable products, and a locally grown source of mobile fuel.

The goals were to examine the feasibility and the economic viability of oilseed crops as feedstock for biodiesel, and the development of coproducts from this feedstock. Biodiesel produced from canola can be economically competitive with petroleum-based diesel fuel assuming farmers can participate in the minor oilseeds provision in the 1990 Farm Bill and that biodiesel processing plants are integrated into existing feed and/or grain handling businesses. With these two important assumptions, biodiesel can be produced for an estimated \$0.59 per gallon --1992--. Current studies are examining emissions, biodegradability, non-toxicity compared to petroleum-based fuels. The macroeconomic benefits of biodiesel plants in Missouri have been defined and the research expanded to look at the range of economic feasibility. Defining the characteristics, organization and other attributes common to successful cooperatives is a goal of this research. Rapeseed meal compares favorably to soybean meal and blood meal as an animal feed. It had higher escape protein value than soybean meal. A hypothesis to be tested is that rapeseed meal would support greater microbial efficiency in the rumen compared to soybean meal when calves consume high to average forage diets.

The work supported by this grant began in fiscal 1993, and the appropriation for fiscal year 1993 was \$50,000. The appropriation for 1994 was \$141,000; and for fiscal year 1995,

\$152,000. A total of \$343,000 has been appropriated. The source of non-Federal funds is State appropriated funds. The amount was \$7,310 in fiscal year 1994.

The work is being carried out at the University of Missouri - Columbia. The principals estimate that three additional years will be required to complete this work.

BROOM SNAKEWEED

Current research addresses several areas for broom snakeweed control, including efforts to understand the biological characteristics of snakeweed, such as whole plant physiology, seedbank ecology, population dynamics, competitive interactions and to investigate any beneficial values of broom snakeweed. Another objective is to develop biologically sound strategies for increasing snakeweed death rate and suppressing germination. Problems associated with animal toxicity are also being studied. The ultimate goals are to develop control programs that are economically, environmentally, and socially acceptable and to increase utilization of natural weed controls.

The project is of regional interest. Broom snakeweed is a serious weed in the Southwestern United States and adjacent Western States. About 22 percent of rangeland in Texas, and 60 percent in New Mexico are infested to some degree by the weed. Current cost for control of broom snakeweed in the southwestern United States is estimated at over \$41 million. Snakeweed is a poisonous plant causing death or abortion in livestock and is a weed which reduces the productivity of associated vegetation.

Ground surveys have been conducted statewide from 1989 to map snakeweed distribution and relative density patterns throughout every county in New Mexico. Snakeweed germination was virtually nonexistent in 1994 as precipitation was from 30 to 80 percent below the normal average. Because snakeweed often establishes when favorable rainfall occurs after drought, surveys will continue to monitor for the presence of seedlings in 1995. Monthly growing season data tapes from the NOAA-10 satellite have been acquired to provide complete coverage of New Mexico from 1987 to present. Using procedures previously developed, annual spectral maps showing snakeweed infestations will be completed. A Geographic Information System --GIS-- approach is used to relate snakeweed populations to plant communities and soil type in areas where snakeweed is particularly dense.

Field studies designed to evaluate the effect of *Puccinia grindeliae*, snakeweed rust, on broom snakeweed continue. Snakeweed

plants within study areas have been tagged and assessed by careful observation for disease status and plant mortality. Recommendations about the likely effectiveness of artificially increasing the range of *P. grindeliae* for biological control of snakeweed in communities which are currently free of the pathogen is anticipated. A study to characterize microbial populations of the rhizoplane and rhizosphere associated with snakeweed root exudates is providing new information on the potential role of root pathogens for biological control. Identification of possible pathogens are being screened for laboratory and greenhouse studies. This set of experiments will reveal if there is a root pathogen responsible for a decrease in snakeweed in certain locations over the 1989-1995 time span. A survey of snakeweed insects was completed with nearly 50,000 insects collected. These are currently in the process of being sorted and identified, but preliminary analyses show various weevils to be especially common on the plants. Weevil are being reared in the laboratory, using artificial diet supplemented with ground snakeweed. Field and laboratory studies have been designed to determine both the life history of the major weevils and the amount of damage done to seed production.

Broom snakeweed dispersal characteristics were monitored in 1994 using seed traps. Relatively large amounts of seed were recovered after periods of intense southwest winter winds and after heavy May rains. The highest average number of seeds produced over twelve plants harvested bi-weekly was estimated at 3,900 per plant. Greenhouse experiments were conducted 6 and 12 months after seed harvest to evaluate the influence of water application intervals and water amount on germination and survival of broom snakeweed. Near the end of the first growing season--October-- after herbicide treatment from the previous fall and burning the previous spring, broom snakeweed mortality averaged 93 percent within burn and herbicide treated plots, 38 percent within burn and burn, and 70 percent within single burn areas. Herbaceous production decreased in the first growing season after burning relative to nonburned of herbicide treated plots.

Grazing trials at two locations continue to relate grazing intensity and season of use to snakeweed establishment. Intensive grazing also reduced snakeweed densities compared to ungrazed areas the second year. Fifty-six crossbred --Hereford, Angus crossbreed-- heifers were included in a study to determine effects of snakeweed consumption on animal performance. After 42 days on feed, heifers were estrually synchronized and artificially inseminated. Consumption of snakeweed did not alter the breeding date or conception rate as pregnancy was similar among diets. Serum clinical profiles indicated some changes from normal, but no

overt toxicosis was noted among heifers fed different diets at any time. Findings suggest it may be beneficial to supplement livestock on rangelands especially when adequate forage is lacking or there are noticeable signs of snakeweed consumptions.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$100,000; fiscal year 1990, \$148,000; fiscal year 1991, \$150,000; fiscal years 1992 and 1993, \$200,000 per year; fiscal year 1994, \$188,000; and fiscal year 1995, \$169,000. A total of \$1,155,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$249,251 state appropriations in 1991; \$200,110 state appropriations in 1992; \$334,779 state appropriations in 1993; and \$302,793 state appropriations in 1994.

Research is being conducted at New Mexico State University. Significant research can be accomplished in about two years. Most of the research is conducted in the field and progress is limited by the length of the growing season.

CANOLA RESEARCH SPECIAL GRANT, KANSAS STATE UNIVERSITY

Rapeseed lines from around the world are being evaluated for increased winter hardiness. Elite lines are being used to develop canola germplasm lines that will survive the winter in the central Great Plains. This will be accomplished using a plant breeding program. The domestic demand for canola oil has been increasing rapidly. With little domestic production, most of the demand has been met by imports. With limited production, private seed companies are not devoting time or money to develop the cultivars needed for canola production in Kansas and central Great Plains. At the present time, two other public canola breeding projects are working in the United States. One is in Georgia and one in Idaho. Both are environments very different to the Great Plains and midwest. Cooperative research is underway with scientists in six other central Great Plains states.

The original goal was to collect germplasm with increased winter hardiness and use it to develop cultivars with sufficient winter survivability to be grown in the central Great Plains. Over 500 rapeseed and canola quality lines cultivars have been acquired and tested. The hardiest have been used as parents to produce lines. In the past two years, nearly 500 crosses have been made. Field and laboratory testing began during the fall of 1994. Segregating populations were acquired from the University of Idaho several years ago and selections from these have been advanced. In 1993 and 1994, advanced selections from these populations had a 30

percent increase in winter survival over the best released cultivars in western Kansas. In eastern Kansas where winter survival was not a factor last year, these same lines had a 20 percent yield advantage over the best released cultivars. In 1994 and 1995, this germplasm is being tested at 12 locations in seven states throughout the Great Plains and midwest.

Work began on this project in 1992. Funding for fiscal year 1992 and fiscal year 1993, was \$100,000 per year; fiscal year 1994 was \$94,000; and fiscal year 1995 was \$85,000. A total of \$579,000 has been appropriated.

Kansas State University has provided \$44,960 in fiscal year 1992, \$21,321 in fiscal year 1993, and \$22,336 in fiscal year 1994. An additional \$50,000 was provided through a grant from industry for fiscal years 1993-1995.

The work is being conducted at Kansas State University, Agricultural Experiment Station, Department of Agronomy. The primary research site is at Manhattan with additional field locations at Hutchinson, Hays, and Colby, Kansas. Germplasm developed by Kansas State University is also being cooperatively tested by researchers in Garden City and Parsons, Kansas; Vernon and Lubbock, Texas; Columbia, Missouri; Ft. Collins, Colorado; Scottsbluff, Nebraska; Carbondale, Illinois; and East Lansing, Michigan. Advanced selections adapted for the growing conditions of the great Plains and representing a significant improvement in both winter hardiness and yield potential for our unique environment should be in the early stages of release in one or two years. The Kansas State University-Agricultural Experiment Station will continue to support research on canola as long as grower interest exists.

CENTER FOR ANIMAL HEALTH AND PRODUCTIVITY, PENNSYLVANIA

This research is designed to reduce nutrient transfer to the environment surrounding dairy farms in the Chesapeake Bay watershed. Progress to date includes the development of a individual dairy cow model which will predict absorbed amino acids and the loss of nitrogen in manure. Background literature has been reviewed and efforts have been initiated for the development of a whole farm model to integrate cow feeding and crop production data. Reducing non-point pollution of ground and surface water by nitrogen from intensive livestock production units is of concern nationally, and especially in the Chesapeake Bay watershed. This research is designed to find alternative feeding and cropping systems which will reduce net nutrient flux on Pennsylvania dairy farms to zero.

The original goal of this research remains the development of whole farm management systems which will reduce nutrient losses to the external environment to zero. To date the researchers have developed their own models to more accurately formulate rations for individual dairy cows which permit the comparison of alternative feeding programs. This model is being tested on select commercial dairy farms to evaluate the extent to which total nitrogen losses in manure can be reduced without impacting economic performance of the farm.

A grant has been awarded from funds appropriated in fiscal year 1993 for \$134,000 and in fiscal year 1994 for \$126,000. In fiscal year 1995, \$113,000 has been appropriated. A total of \$373,000 has been appropriated. Information on funding support from non-federal funds is not available at the present time.

Research is being conducted at the University of Pennsylvania, College of Veterinary Medicine. The University researchers anticipate that work currently underway will be completed in August, 1995.

CENTER FOR INNOVATIVE FOOD TECHNOLOGY, OHIO

The Center will encourage innovative research by leveraging private sector funds to underwrite projects designed to assess the feasibility of deploying emerging technologies in specific applications and traditional "non-food" technologies in specific food processing situations.

The value-added food processing industry is the largest industry in Midwestern states, including Ohio. In Ohio alone, the industry contributes over \$13 billion to the annual economy. From an economic development point of view, processing and adding value to crops grown within a region is the largest possible stimulus to that region's total economic product.

The work supported by this grant begins in fiscal year 1995 with an appropriation of \$181,000. It is anticipated that private sector funds will augment the federal funds used to support the selected research projects, though the amounts are not known at this time.

Research will be conducted in the laboratories and pilot plants of investigators successfully competing for available funds, including at the Ohio State University. The principal investigators anticipate that the proposed work supported by this grant will continue through January 1996.

CENTER FOR RURAL STUDIES, VERMONT

The University has developed a database and State-wide information resource of social and economic indicators for small business and community economic development. Businesses, institutions, and citizen groups in the State can request technical assistance from the Center in developing their business plans or strategic plans for their town or rural community. In addition the database is used by planners and analysts to help determine State-wide trends and conditions affecting rural development. The database and analytical capability provide technical indicators and timely information to support entrepreneurial and community development activities in the State. The program is conducted in concert with other University and State agency outreach activities.

The original goal was to create a database and analytical capability for rural development in Vermont. Examples of past accomplishments include thematic maps presented to help target child hunger programs and target places for programmatic intervention; analytical reports provided to a retail shopping mall to help it attract new business to fill vacant space; and a reference volume, "Economic Handbook for Vermont Counties," produced for public distribution to help Vermont citizens and leaders answer the most frequently asked questions about their State or its counties.

The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992-1993 was \$37,000 per year; fiscal year 1994, \$35,000; and fiscal year 1995, \$32,000. A total of \$141,000 has been appropriated.

Prior to receipt of any Federal funds in fiscal year 1991, the Center was supported by \$91,130 in State and other non-federal funds. In fiscal year 1992, these funds increased to \$101,298 and to \$143,124 in fiscal year 1993. Information for 1994 is incomplete at this time.

Research is being conducted at the University of Vermont. The University researchers have not provided a termination date.

CHESAPEAKE BAY AQUACULTURE, MARYLAND

The objective of this research is to improve the culture of striped bass and the American oyster through genetics, reproductive biology, nutrition, and health management. The research provides a good balance between basic and applied research. The Mid-Atlantic region of the country has significant opportunities to contribute to the overall development of the domestic aquaculture industry.

Research supported through this program can have broad application and enhance production efficiency and the sustainability of aquaculture as a form of production agriculture.

The original research goal was to generate new knowledge that can be utilized by the aquaculture industry to address serious problems limiting the expansion of the industry in Maryland and the Mid-Atlantic region. The program continues to focus on the areas of reproductive biology, broodstock improvement, nutritional biochemistry, and fish health. Research in the area of reproductive biology has led to controlled artificial spawning of the striped bass. Researchers have made progress in developing domestic stocks of striped bass for commercial aquaculture. Scientists are conducting studies aimed at improving diet formulation to reduce waste generation in striped bass production systems.

The work supported under this grant began in fiscal year 1990 and the appropriation for fiscal year 1990 was \$370,000. The appropriations for fiscal years 1991-1993 were \$437,000 per year, fiscal year 1994, \$411,000, and fiscal year 1995 \$370,000. A total of \$2,462,000 has been appropriated.

The university reports the amount of non-federal funding for this program is as follows: in fiscal years 1991 and 1992, \$200,000; in fiscal years 1993 and 1994, \$175,000. The university reports that 40 percent of these funds are from direct state appropriations and 60 percent of these funds are from other non-federal funding sources.

Research is being conducted at the University of Maryland. The university researchers anticipate that the work will be completed in fiscal year 1998.

COMPETITIVENESS OF AGRICULTURE PRODUCTS, WASHINGTON

This grant is for the purpose of improving the global competitiveness of agricultural and forest products, especially value-added products, produced in the Pacific Northwest region. This is accomplished through a program of research of foreign market assessments, product development, and policy and trade barrier studies in conjunction with use of appropriate outreach programs.

Rural economic development and growth of the Pacific Northwest region is dependent upon the ability of the agricultural and forest products sectors to penetrate and maintain exports of food and forest products in overseas markets, especially in the

Pacific Rim countries. While the research has a regional focus, results of many of the projects are adaptable by other regions of the U.S. for export enhancement purposes.

Washington State University has completed numerous projects this past year and is transferring research results to users on the production of Waygu cattle and azuki beans for export; a method to export Walla Walla onions; an assessment of Western European regulatory trade barriers; a method to relate subjective measures of taste in apples to instrumental measures; technical knowledge on use of wood products; collaborative work to open the Japanese market to U.S. apples; and establishment of links with numerous foreign scientific institutions. This grant will be used to develop value-added food products for export, assess the feasibility of producing root crops popular in Japan, develop a surimi product from carp and pink salmon, and continue to identify new markets for crops that can be produced in the Pacific Northwest.

The University of Washington has completed studies on the Russian forest sector outlook and export market potential; the changing lumber supply and use market including prefab housing in Japan; assessment of the North American Free Trade Agreement on Mexico's forest products sector; assessment of the export market for value-added millwork products; impacts of domestic climate warming mitigation programs on international forest products markets; biodiversity management concepts; and impacts of alternative forest practice rules to protect owl sites. This grant will be used to continue studies on country analyses of supply and utilization of forest products; market competitiveness focusing especially on quality problems and technologies to improve quality; improving the analytical capability to assess trade and environmental issues; and expanding the outreach program both regionally and nationally.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992-1993 was \$800,000 per year; fiscal year 1994, \$752,000; and fiscal year 1995, \$677,000. A total of \$3,029,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$716,986 State appropriations, \$209,622 product sales, \$114,000 industry, and \$661,119 miscellaneous for a total of \$1,701,727 in 1991; \$727,345 State appropriations, \$114,581 product sales, \$299,000 industry, and \$347,425 miscellaneous for a total of \$1,488,351 in 1992; \$1,259,437 State appropriations, \$55,089 product sales, \$131,000 industry, and \$3,000 miscellaneous for a total of \$1,448,526 in 1993; and \$801,000 State appropriations,

\$1,055,000 product sales, \$1,040,000 industry, and \$244,000 miscellaneous for a total of \$3,140,000 in 1994. The preliminary allocation for 1995 is \$785,000 State appropriations, \$2,080,000 product sales, \$1,204,000 industry, and \$63,000 miscellaneous for a total of \$4,132,000.

The research program is being carried out at Washington State University, Pullman, and the University of Washington, Seattle. This is a continuing program of research with several long-term crop improvement projects. With the exception of the improvement projects, most of the work can be completed by 1998.

COOL SEASON LEGUME RESEARCH

The Cool Season Legume Research Program involves projects to improve efficiency and sustainability of pea, lentil, chickpea and fava bean cropping systems collaborative research. Scientist from seven states where these crops are grown have developed cooperative research projects directed toward crop improvement, crop protection, crop management and human nutrition/product development. These crops are major cool season food legumes for temperate regions of the world. In the United States disease, insect, weed and environmental stress problems have increased in recent years reducing their economic competitiveness. Since these crops are key rotation crops in the sustainable production of major cash crops, e.g. wheat, research to maintain or increase their competitiveness has important regional impact.

The work supported by this grant began in fiscal year 1991 with appropriations for fiscal year 1991 of \$375,000; fiscal years 1992 and 1993 were \$387,000 per year; fiscal year 1994, \$364,000; and fiscal year 1995, \$103,000. A total of \$1,616,000 has been appropriated.

The nonfederal funds provided for this grant were as follows: 1991, \$304,761 state appropriations, \$14,000 industry, and \$18,071 other nonfederal; 1992, \$364,851 state appropriations, \$15,000 industry, and \$14,000 other nonfederal; 1993, \$400,191 state appropriations, \$19,725 industry, and \$10,063, other nonfederal and 1994, \$147,607 nonfederal support. Projected nonfederal support for 1995 is \$39,814.

Research is being conducted at agricultural experiment stations in Idaho, Oregon, Washington, Wisconsin, Minnesota, New York and New Hampshire. The current research is anticipated to run through fiscal year 1996.

CRANBERRY-BLUEBERRY DISEASE AND BREEDING, NEW JERSEY

This work has focused on the identification, breeding, and incorporation of superior germplasm into horticulturally-viable genotypes. Research has also included efforts on weed control, integrated pest management, and environmentally-compatible pesticides. Although this work involves diseases having impacts on New Jersey's cranberry and blueberry industries, the findings here are closely followed by scientists in Wisconsin, Michigan, and New England.

The original goal was the development of cranberry and blueberry cultivars compatible with new disease and production management strategies, and this continues to be the goal. The evaluation of almost 7,000 highbush blueberry plants involved continuous selection, narrowing down the cohort to 15 selections that were propagated by softwood cuttings planted to a replicated field trial. More intense studies are in progress. A large number of cranberry crosses made previously were outplanted at various grower sites, and selection of superior seedlings is underway. Herbicide studies showed that glyphosate was over 98 percent effective in controlling and weed tiny-headed goldenrod in cranberry plantings. A study on waterlily was completed. Late summer application of two herbicides in combination significantly reduced waterlily populations. This was the final year of the weed control study in cranberry. Insect management studies showed that seven species of hymenoptera and a dipteran parasite were recovered from the spotted fireworm, a serious cranberry pest. Disease management work revealed two species of *Phytophthora* in roots of diseased cranberry vines, and their importance in cranberry production was confirmed.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, \$100,000; fiscal years 1986-1987, \$95,000 per year; fiscal years 1988-1989, \$260,000 per year; fiscal year 1990, \$275,000; fiscal years 1991-1993, \$260,000 per year; fiscal year 1994, \$244,000; and fiscal year 1995, \$220,000. A total of \$2,311,000 has been appropriated.

The non-federal funds and sources provided for this grant were \$400,000 state appropriations, \$90,000 industry, \$50,000 product sales, and \$25,000 miscellaneous in 1994.

This research is being conducted at the New Jersey Agricultural Experiment Station. The researchers anticipate that an additional three to ten years of research is necessary.

CRP ACREAGE USAGE, MISSOURI

The investigators have completed a classification of CRP enrolled lands for agricultural productivity, erosion, and wildlife potential. Empirical techniques are being developed and refined. The investigators are ready to provide an assessment of CRP policy implications on environmental factors as well as estimate impacts of proposed CRP policy changes on the agricultural sector.

There is a national need to gain a better understanding of how Federal environmental policies affect the production decisions of farmers and the output of food and fiber in the U.S. This information is crucial to ensuring a reasonable balance between agriculture and the environment.

The research supported by this grant began in fiscal year 1994. The appropriations are \$141,000 for fiscal year 1994 and \$52,000 for fiscal year 1995 for a total of \$193,000.

The non-federal funds and sources provided for this grant are \$2,100 State appropriations in 1994 and \$19,995 State appropriations for 1995.

The work is being carried out at the University of Missouri. The investigators indicate the work is of a continuing nature and may extend through the duration of the CRP program.

DAIRY GOAT RESEARCH, PRAIRIE VIEW A&M, TEXAS

The program has addressed a range of issues associated with goat production. Research by scientists at the International Dairy Goat Center, Prairie View A&M University focuses on a range of problems effecting goat production in the United States. Issues have included the study of nutritional requirements of goats, disease problems --e.g. *Corynebacterium pseudotuberculosis*-- , methods to improve reproductive efficiency in the doe, the use of gene transfer to improve caprine genetics and the evaluation of breeding schemes to improve meat and milk production. Nationally, many of the enterprises that include goats are diverse and maintain relatively small numbers of animals. Responding to disease, nutrition, breeding and management problems will improve efficiency of production and economic returns to the enterprise.

Grants have been awarded through appropriated funds as follows: \$100,000 per year for fiscal years 1983-85; \$95,000 per year for fiscal years 1986-88; no funds were appropriated in fiscal year 1989; \$74,000 for fiscal year 1990; \$75,000 per year for fiscal years 1991-93; \$70,000 for fiscal year 1994; and \$63,000

for fiscal year 1995. A total of \$1,017,000 has been appropriated. The university reports no non-federal funds expended on this program.

Research is being conducted at Prairie View A&M University in Texas. The university researchers anticipate that work will be completed in fiscal year 1997.

DELTA RURAL REVITALIZATION, MISSISSIPPI

This project has gone through several phases in the delineation of a strategy for a long-range development plan for the Mississippi Delta region. Phase I was completed with the delivery of a baseline assessment of the economic, social, and political factors that enhance or impede the advancement of the region. Phase II of the project evaluated the potential for entrepreneurship and small business creation as mechanisms to improve economic conditions. Phase III is now in its second year. It focuses on technical assistance to Delta region manufacturing firms to strengthen their ability to provide employment and incomes. Phase III will be continued into the 1994 proposal. It will continue emphasis on technical assistance to industry and the further development of a special industrial support database and analysis unit located at Stoneville, Mississippi.

The counties that comprise the Mississippi Delta region in northwestern Mississippi have traditionally been among the poorest counties in the United States for well over a century. The cotton economy that made the Delta region famous has been subjected to many external forces as well as changes within the agricultural sector. The project will help diversify the agriculturally dominant economy by encouraging an industrial development and growth process to provide new jobs and new sources of income for Delta residents.

The original goal was to create an analytical baseline for the Delta region. A publication titled, "A Social and Economic Portrait of the Delta," serves as an analytical baseline for further work. The second phase of the project created a Delta Inventors Society to assist creative persons in developing ideas which can be successfully commercialized, and a companion Entrepreneurial Forum was established to help new business ventures with start-up advice and assistance. Finally, a Venture Capital Association was formed to help both inventors and businessmen find capital resources to carry out their plans. A report covering the creation and initial activities of these groups was prepared in 1992. Evaluation of the impacts of these efforts will continue through September 1995. The focus of the project now has clearly

shifted to industrial technical assistance, and the fiscal year 1994 proposal includes provisions to hire a qualified industrial consultant to work with selected Delta firms in a program of self improvement. It is understood that the consultant will conduct industry surveys and develop industry inventories to help create a regional strategic plan to develop new markets for non-agricultural products from the Delta. With an independent database and analytical unit to monitor Delta economic factors, the impacts of the technical assistance can be determined over time.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$175,000; fiscal year 1990, \$173,000; fiscal years 1991-1993, \$175,000 per year; fiscal year 1994, \$164,000; and fiscal year 1995, \$148,000. A total of \$1,185,000 has been appropriated.

Total non-federal funds directed to this project, as reported by Mississippi State University, are: fiscal year 1991, \$117,866; fiscal year 1992, \$84,402; and fiscal year 1993, \$68,961. These numbers include State and other non-federal sources under University accountancy. They do not include the indirect or direct contributions of local development organizations or commitments made by local industrial firms in collaboration with the project. It is not possible to accurately reconstruct the value of the latter items. Reports for fiscal year 1994 are incomplete at this time.

Research is being conducted at Mississippi State University. The funding awarded to date will continue to support evaluation studies through September 1995. Fiscal year 1994 funds were not requested until September of that year. Although grantee has been notified of the availability of fiscal year 1995 funds and a proposal has been formally solicited, application for fiscal year 1995 funds has not been received as of this time. No timetable has been received for the funding appropriated in fiscal year 1995.

DEVELOPING PEAS AND LENTILS FOR RESIDUE TO MEET SCS STANDARDS

This program was designed to provide pea and lentil cultivars and management systems which will leave sufficient residue on the land to meet SCS requirements for conservation tillage. The residue is needed to provide erosion protection when subsequent crops are planted. Since lentils production occurs primarily in the states of Washington and Idaho, this work is of principal interest in that region. However, it is designed to reduce erosion which is a national priority.

The work supported by this grant begins in fiscal year 1995 and the appropriation for fiscal year 1995 is \$226,000. The nonfederal funds projected to be available for this work in 1995 are \$11,100 from state appropriations.

Research will be conducted in Washington and Idaho by the respective Agricultural Experiment Stations. The researchers anticipate that work may be completed in fiscal year 1996.

DRIED BEAN RESEARCH, NORTH DAKOTA

This project was designed to develop cultivars of edible dry beans with improved biological efficiency, pest resistance and nutritional quality for production in North Dakota. In addition, the research is assessing the potential for yield losses caused by pathogenic bacteria. The regional need for this research is to maintain stable production of edible dry beans in the northern Great Plains. Diseases have a significant negative impact on bean seed quality and yield. Improved disease resistance and disease forecasting systems are needed for the crop to remain economically competitive.

The original goal of this research was to meet cultivar requirement for disease resistance and other production problems which would allow North Dakota dry bean farmers to remain competitive in the domestic and world market. Results to date include release of new cultivars that mature early, are high yielding with improved disease resistance and seed quality. Exotic germ plasm with resistance to bean rust has been introduced, and several sources of tolerance to common blight have been identified.

The work supported by this grant began in fiscal year 1977 and appropriations were for fiscal years 1977-1981, \$25,000 per year; fiscal year 1982, \$24,000; fiscal years 1983-1984, \$25,000 per year; fiscal year 1985, \$50,000; fiscal year 1986, \$87,000; fiscal years 1987-89, \$75,000 per year; fiscal year 1990, \$87,000; fiscal year 1991, \$93,000; fiscal years 1992-1993, \$100,000 per year; fiscal year 1994, \$94,000; and fiscal year 1995, \$85,000. A total of \$1,120,000, has been appropriated.

The nonfederal funds provided for this grant were as follows: 1992, \$38,422 state appropriations and \$12,843 other nonfederal; 1993, \$38,329 state appropriations and \$16,938 other nonfederal; and 1994, \$56,099 other nonfederal.

This research is being conducted at the North Dakota Agricultural Experiment Station, North Dakota State University.

The university researchers anticipate that this work may be completed in fiscal year 1995.

DROUGHT MITIGATION, NEBRASKA

The purpose of the grant is to assist in the creation of a National Drought Mitigation Center. The Center will serve as a national information clearinghouse on drought assessment, mitigation, preparedness, and response options for decision makers in the public and private sectors. Drought is a normal part of climate for virtually all regions of the United States and other countries. The impacts of drought are diverse and affect the economic, environmental, and social sectors of society. Almost without exception, the occurrence of widespread severe drought in recent years has illustrated the inadequacy of existing assessment, mitigation, response, and planning efforts at the Federal, state and local level. Rather than the "crisis management" of the past, a "risk management" approach is needed where the emphasis is on preventative measures, preparedness, education, and mitigation strategies.

The work supported by this grant begins in fiscal year 1995 with an appropriation of \$200,000. The University of Nebraska is contributing \$75,737 of non-federal funds in support of this research in fiscal year 1995.

The research will be conducted at the University of Nebraska-Lincoln. The researchers anticipate that work may be completed in fiscal year 2000.

ENVIRONMENTAL RESEARCH, NEW YORK

The environmental research in New York consists of two main thrusts which are aimed at understanding the nitrogen flowing from agricultural activities and their impacts on adjacent ecosystem components, and the agricultural dimensions of global climate change. Included in the program are a technology transfer aspect and an environmental assessment activity.

The research being conducted is unique in that nothing comparable is being done in the region or the nation. There are needs to understand the impacts of ecosystem components upon each other; as global change occurs these needs will increase.

The program is to identify and address interactions and feedbacks between agricultural ecosystems, natural ecosystems, and natural resources which affect the long-term well being of each. Agroecosystem management strategies that maintain agricultural

productivity and environmental quality are to be devised. And the third goal is to assist the development of policies for addressing problems at the interface between agriculture and the environment.

Experiments have been established and are being carried out to achieve the goals above. Several aspects of nitrogen supply interactions with crops and the recovery of fertilizer nitrogen at crop harvest. Water quality research has been focussed on the relation of intensive animal production areas and contamination by nitrates. Geographic Information System capability is being developed to make feasible various scenarios regarding the future of agriculture in broad landscape changes.

The work supported by this grant began in fiscal year 1991 with an appropriation of \$297,000. The fiscal years 1992-1993 appropriation was \$575,000 per year; \$540,000 in fiscal year 1994; and fiscal year 1995, \$486,000. A total of \$2,473,000 has been appropriated.

In fiscal year 1991 Cornell University provided \$27,893 and the State of New York provided \$118,014. In fiscal year 1992 Cornell University provided \$37,476 and the State of New York \$188,915. In fiscal year 1993 Cornell University provided \$13,650 and the State of New York \$243,251. In fiscal year 1994 the State of New York provided \$214,989. In fiscal year 1995 the State of New York provided \$233,085.

This research is being conducted at Cornell University. The University researchers anticipate that this work may be completed in 1996.

EXPANDED WHEAT PASTURE, OKLAHOMA

This project was designed to develop improved supplementation programs and new systems for technology delivery to reduce production risk of raising cattle on wheat pasture. The work involves evaluation of grazing termination date on grain and beef production, assess the impact of wheat cultural practices and develop an economic model to evaluate alternative decisions on grain/beef production. This work addresses the needs of wheat/cattle producers of Oklahoma as a primary focus. However, it would appear to have some application regionally in adjacent states.

The original goal of this research was to develop economically viable management systems for use of wheat for supplemental pasture for beef cattle before the crop starts making grain. This work has already shown how the use of feed supplements

can increase net profit from cattle grazing on wheat pasture. The study has identified management practices, e.g. date of planting, cultivar selection, grazing intensity and date of cattle removal that produce the optimum grain yield and cattle gain. A Wheat/Stocker Management Model has been developed as a decision aid to help producers assess income risk in the operation. Work is underway on a Wheat Grazing Systems simulation model.

The work supported by this grant began in fiscal year 1989 and appropriations were as follows: fiscal year 1989, \$400,000; fiscal year 1990, \$148,000; fiscal year 1991, \$275,000; fiscal years 1992-1993, \$337,000 per year; fiscal year 1994, \$317,000; and fiscal year 1995, \$285,000. A total of \$2,099,000 has been appropriated.

The nonfederal funds and sources provided for this grant were as follows: \$175,796 state appropriations in 1991; \$174,074 state appropriations in 1992; and \$236,584 state appropriations in 1993. The nonfederal support for 1994 was \$238,058 for state appropriations.

The research is being done at Oklahoma State University. The scientists estimate this work will be completed in fiscal year 1995.

FARM AND RURAL BUSINESS FINANCE, ILLINOIS AND ARKANSAS

The purpose of this program is to conduct research and disseminate results on three general areas: financial management and performance of farm and rural businesses; financial markets and the performance of credit institutions serving rural areas; and public credit policies and programs for their impacts on farm and rural business borrowers. There is a national and regional need by farmers, rural financial institutions, and other rural businesses for research results addressing farm and rural credit policies and problems and management options, economic implications of the dynamic changes occurring in the structure of financial markets, and description of the impacts of changing public policies affecting financial institutions doing business in rural America.

The program has completed a variety of studies addressing the goals of this program. These studies include credit evaluation procedures, reverse mortgages and farm estate management, examination of farm asset returns, new farmer loan programs, cash versus accrual measures of income, experience with Chapter 12 bankruptcy, farm level effects of young farmer lending programs, and others. Twelve new projects will be undertaken with the 1995 funds, including an evaluation of vertical coordination and

financing arrangements, financing strategies for small farms and rural development, capital leasing arrangements, farm portfolio diversification, explanation of farmland prices, and financial regulatory costs.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992-1993 was \$125,000 per year; fiscal year 1994, \$118,000; and fiscal year 1995, \$106,000. A total of \$474,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$58,427 State appropriations, \$189,000 industry, and \$12,000 miscellaneous for a total of \$259,427 in 1991; \$94,588 State appropriations, \$133,000 industry, \$25,000 miscellaneous for a total of \$252,588 in 1992; \$87,890 State appropriations, \$115,000 industry, and \$85,000 miscellaneous for a total of \$287,890 in 1993; and \$221,000 State appropriations, \$45,000 industry, and \$125,000 miscellaneous for a total of \$391,000 in 1994. The preliminary 1995 non-federal allocation for this project is \$46,000 State appropriations and \$62,500 industry for a total of \$108,500.

The work is being carried out at the University of Illinois and the University of Arkansas. The principal researchers consider this program to be an on-going research effort with Federal funds needed to complete the start-up.

FLORICULTURE, HAWAII

The research program is continuing to search for new ways of producing disease and insect free cut flowers and foliage that have high quality for export markets and the United States mainland. Research is being conducted on various aspects of disease control including breeding using standard techniques and genetic engineering, developing pest management programs for anthurium blight, quarantine regulations, and economic research to maintain and expand markets. The need for this research is to enhance and maintain the multimillion dollar Hawaii floriculture industries competitive position in the face of increasing competition in global and United States markets.

The original goal of this research was to develop superior varieties, improve productivity, reduce pest problems and improve the shipping quality of flowers sent to distant markets. Research to date has developed promising new postharvest insect treatments; progress in developing new varieties of anthurium resistant to blight; reducing nitrogen fertilizer somewhat can reduce anthurium

diseases; and marketing research shows that 74 percent of the anthuriums sold in the United States are still grown in Hawaii.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$300,000; fiscal years 1990-1993, \$296,000 per year; fiscal year 1994, \$278,000; and fiscal year 1995, \$250,000. A total of \$2,012,000 has been appropriated.

The nonfederal funds and sources provided for this grant were as follows: \$115,881 state appropriations in 1991; \$118,905 state appropriations in 1992; \$130,530 state appropriations in 1993; and \$129,870 state appropriations in 1994.

Research is being conducted at the University of Hawaii-Manoa and Hilo. It is anticipated that work may be completed in fiscal year 1995.

FOOD AND AGRICULTURE POLICY INSTITUTE, IOWA AND MISSOURI

The Food and Agriculture Policy Research Institute --FAPRI-- was established by Iowa State University and the University of Missouri, Columbia, in 1984. The purpose of the institute is to conduct comprehensive analyses and disseminate results about the economic impacts of U.S. food, farm, and trade policies to agricultural producers, agribusinessmen, and public policymakers. Iowa State conducts research on the economic interrelationships within and between domestic and foreign food and agricultural markets from the farm gate to market destinations; develops and maintains databases and analytical support systems to facilitate the analysis of agricultural and trade policy issues; and evaluates the impacts of U.S. and foreign commodity supply, demand, and public policy programs on agricultural trade. The University of Missouri maintains models of the domestic agricultural economy and directs its efforts primarily to the analysis of domestic policy issues. The two universities maintain linkages with a number of other universities who provide data and analytical support to the system.

The universities maintain a comprehensive analytical modeling system of the U.S. and international food and agricultural sectors to evaluate near- and long-term economic implications of alternative farm policies for the basic commodities. The system is capable of providing economic information on potential impacts out to 10 years in the future of farm policies on farm prices, income, output, government program costs and means to enhance the management of farm programs at the national level.

The Nation's agricultural sector and its components are subject to numerous Federal policies and programs. FAPRI is the only public supported, non-federal organization with the analytical capability to assess and evaluate the numerous public policies and programs affecting the agricultural sector and report results to a broad constituency including farmers, agribusinessmen, and Federal and State policymakers.

Grants have been awarded from funds appropriated as follows: fiscal years 1984-1985, \$450,000 per year; fiscal years 1986-1987, \$357,000 per year; fiscal year 1988, \$425,000; fiscal year 1989, \$463,000; fiscal year 1990, \$714,000; fiscal years 1991-1993, \$750,000 per year; fiscal year 1994, \$705,000; and fiscal year 1995, \$850,000. The total amount appropriated is \$7,021,000.

The non-federal funds and sources provided for this grant are as follows: \$260,355 State appropriations, \$113,565 industry, and \$37,913 miscellaneous for a total of \$411,833 in 1991; \$321,074 State appropriations, \$51,500 industry, and \$35,100 miscellaneous for a total of \$407,674 in 1992; \$234,796 State appropriations and \$70,378 industry for a total of \$305,174 in 1993; \$78,286 State appropriations, \$43,925 industry, and \$29,750 miscellaneous in 1994 for a total of \$151,961 in 1994; and \$80,155 State appropriations, \$37,128 industry, and \$42,236 miscellaneous for a total of \$159,519 for 1995.

The program is carried out at the Center for Agriculture and Rural Development, Iowa State University and the Center for National Food and Agricultural Policy, University of Missouri. This is a continuing program of research and analysis for the purpose of assessing farm and related policy actions likely to affect the agricultural sector and its components.

FOOD IRRADIATION, IOWA

Research has been conducted on 1) survival of pathogenic microorganisms to medium-dose irradiation at various dose-rates in fresh meats, 2) effect of packaging atmosphere on survival of pathogenic microorganisms and on product quality after irradiation at medium doses in pork, 3) reduction of microbial contaminants by combination of medium-dose irradiation and other processes in chicken and beef products, 4) comparison of radiation resistance of various isolates of bacterial pathogens to irradiation resistance of various isolates of bacterial pathogens to irradiation in beef and poultry products, and 5) shelf-life of fresh meat products after irradiation at medium doses. In addition, studies involving irradiation of foods not of animal origin are also being conducted, specifically low-dose irradiation of strawberries for shelf-life

extension, and irradiation of plant protein exudates to improve textural integrity of biodegradable plastics. In addition, studies on the effect of irradiation conditions on quality of beef, pork, and poultry have been conducted. Specifically, the effect of product temperature, packaging atmosphere and dose on lipid oxidation, color, and microbial quality has been studied and coupled with sensory evaluation of such products after broiling, in comparison with unirradiated samples. Consumers' attention and concern about the safety of fresh meat has increased with recent outbreaks of foodborne illness from E. coli 0157:H7. The meat industry has also expressed interest regarding the quality of irradiated products, and how this process can be used to yield high quality fresh meats that are free of pathogens.

The work supported by this grant began in fiscal year 1991 when \$100,000 was appropriated for this project. The appropriations for fiscal years 1992 and 1993 were \$237,000 per year; fiscal year 1994, \$223,000; and fiscal year 1995, \$201,000. A total of \$998,000 has been appropriated.

The project received \$1,037,270 in State of Iowa funds- \$1 million of which was for capital construction- in fiscal year 1991; \$37,942 in state funds and \$67,800 in industry grants in fiscal year 1992; \$68,897 in state funds, \$78,300 in industry grants and \$9,666 in user fees in fiscal year 1993; and \$70,652 in state funds, \$35,420 in industry grants and \$47,788 in user fees in fiscal year 1994.

Research is being conducted at Iowa State University. The principal investigator anticipates that the project will continue through 1996.

FOOD MARKETING POLICY CENTER, CONNECTICUT

The Food Marketing Policy Center was established in 1988 at the University of Connecticut at Storrs. The Center conducts interdisciplinary research on food and agricultural marketing and related public policy issues that influence the economic performance of the food marketing system. Emphasis is on studies of how public policies and the organization and strategies of the private sector affect industry competitiveness and the delivery of food and services, their costs, prices, and safety. The Center works closely with the University of Massachusetts in carrying out the research program.

The Center's research goal is to identify marketing problems and assess alternatives that would improve the economic performance of the U.S. agricultural and food marketing sector and conduct

research in conjunction with the Hatch regional research project NE-165, "Private Strategies, Public Policies and Food System Performance."

The Center has completed a number of studies on food marketing, including a description of food quality issues and enhancement policies; private label food brands; advertising strategies of agricultural cooperatives; an assessment of food retailing mergers and competition; and evaluation of State dairy regulations, branded product marketing strategies, supermarket chain entry, oligopsony in agricultural markets, and the impact of agricultural cooperatives on food processor market performance. Also, the Center has developed analytical methods to assess market performance and sponsored several workshops on industrial organization issues. Food safety economic issues have or are being addressed in two books and several workshops that summarize research done by researchers of the center and the regional research project.

The Center has implemented its comprehensive research plan. This grant will be used to support research on 12 projects with research targeted at three problem areas. They are factors shaping decisions by food firms and the consequent effects; impact assessment of public intervention on firm food safety and quality strategies; and analysis of public policies affecting competition in food markets. Projects being funded include analyses of the effects of trade agreements on food quality and trade in food products; an assessment of the efficiency aspects of ex ante versus ex post approaches to food safety problems; firm strategic responses to food safety and nutrition regulation and effects on competition, market structure and food price levels; demographic patterns of foodborne illness for high risk populations; market structure on food advertising activity; competitive strategies of cooperatives; basic research on oligopoly theory; and publication of new data sets on the food industry.

Grants have been awarded from funds appropriated as follows: fiscal year 1988, \$150,000; fiscal year 1989, \$285,000; fiscal year 1990, \$373,000; fiscal years 1991-1993, \$393,000 per year; fiscal year 1994, \$369,000; and fiscal year 1995, \$332,000. A total of \$2,688,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$234,259 State appropriations in 1991; \$231,741 State appropriations in 1992; \$201,288 State appropriations in 1993; \$234,557 State appropriations in 1994; and \$219,380 State appropriations for 1995.

The research is being carried out by the Connecticut Agricultural Experiment Station at Storrs. Work planned under this phase of the project is scheduled for completion with expiration of the current NE-165 regional research project in 1997.

FOOD PROCESSING CENTER, NEBRASKA

The University of Nebraska Food Processing Center has been conducting short-term, highly applied research projects to assist small and mid-sized food processing companies and entrepreneurs to develop or improve processes and products and to develop new food processing enterprises. Priorities were placed on projects relating to the safety of the food product or process and to the fulfillment of regulatory mandates such as nutrition labeling, use of approved and effective ingredients, and adherence to regulations imposed by foreign governments. In addition, several research projects were conducted to improve or assess the quality, extend the shelf-life, or assess or improve the processing efficiency of specialty food products which impacted several processors or used alternative agricultural products such as popcorn, dry edible beans, edamame soybeans, other novel legumes, and milkweed seed oil.

The primary impact of this project will be statewide. Small and mid-sized food processing companies and entrepreneurs have limited technological capabilities for addressing issues related to product development, process development, product and process evaluation, food safety, quality assurance, and regulatory mandates. The short-term research and technology transfer projects conducted as part of this overall project will aid these companies in appropriately addressing these oftentimes complicated issues.

Technological evaluations were conducted for 121 individuals or companies interested in developing new food processing businesses. Six companies were assisted with product formulation modification for specific export markets. Microbiological analyses were conducted for 9 mid-sized companies including extensive shelf-life assessments for two of these companies. Sanitation audits were conducted for 6 small and mid-sized companies in Nebraska. Nutritional analyses were conducted for 27 small to mid-sized Nebraska food companies who were preparing for the new nutritional labeling regulations; several products were analyzed for some of these companies. Short term research projects were conducted on mold and mycotoxin contamination of popcorn, growth of foodborne bacterial pathogens in specialty bakery items, and the development of novel ingredients from dry edible beans and egg yolks.

The work supported by this grant began in fiscal year 1992. The appropriations were \$50,000 per year for fiscal years 1992-1993; \$47,000 for fiscal year 1994; and \$42,000 for fiscal year 1995. A total of \$189,000 has been appropriated.

The Food Processing Center received \$167,002 in State funds, \$557,621 in sales and fees, and \$465,136 in food industry grants and miscellaneous sources from 1992 through 1994.

Research is being conducted at the University of Nebraska. The principal investigator anticipates that research supported by fiscal year 1995 funds will be completed in 1996.

FOOD SYSTEMS RESEARCH GROUP, WISCONSIN

The Group conducts research on issues affecting the organization and competitiveness of the U.S. food system in domestic and international markets. The issues include new technologies, market structure, and government policies and programs. Studies have been completed on feed cattle and hog pricing as influenced by changing industry structure; causes of structural change in the flour milling, soybean oil milling, wet corn milling, cottonseed milling, beef packing, and broiler processing industries; competition in U.S. food markets; and the relationship between U.S. food market structure and the industry's performance in global markets. There is a national need to assess and evaluate the organization and performance of the Nation's food industry to ensure that it satisfies performance expectations of farmers and consumers and adheres to acceptable standards of conduct.

The Food Systems Research Group has completed numerous studies on the economic structure and performance issues about the U.S. food manufacturing and distribution system. Basic research is conducted on market theories; effects of mergers, new technologies, and firm conduct on industry structure and organization; factors affecting industry prices, profits, efficiency and progressiveness; and impact of public policies and regulations on food system organization and performance. Current research in progress includes a legal-economic analysis of cheese price discovery by the National Cheese Exchange, impact of renewed competitive forces on previously protected industries, revision of a previously published book edition describing the structure and performance of the food industry, and completion of the cheese price discovery study.

Grants have been awarded from funds appropriated as follows: fiscal years 1976-1981, \$150,000 per year; fiscal years 1982-1985, \$156,000 per year; fiscal years 1986-1989, \$148,000 per year;

fiscal year 1990, \$219,000; fiscal years 1991-1993, \$261,000 per year; fiscal year 1994, \$245,000; and fiscal year 1995, \$221,000. A total of \$3,584,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$120,304 State appropriations in 1991; \$119,448 State appropriations in 1992; \$85,188 State appropriations in 1993; and \$96,838 State appropriations in 1994. The university has allocated \$100,869 in State appropriations to this grant for 1995.

The grant supports a core research group at the University of Wisconsin, Madison. The Food Systems Research Group expects to complete the existing plan-of-work in 1997 with some individual projects completed prior to that date.

FORESTRY RESEARCH, ARKANSAS

The Center for Integrated Forest Management Strategies is to be funded under this grant. Center objectives are to develop and evaluate alternative forest management strategies for achieving multi-resource objectives on private and non-industrial forestlands, and to evaluate and measure the environmental implications of forest management alternatives. Southern forests are having to bear the brunt of providing the majority of wood products for the United States since the forests of the Northwest have reduced their levels of production drastically. There are many other non-timber resources that southern forests produce including clean water, wildlife, opportunities for hiking, hunting, fishing, camping, and other recreational activities. Conflicts sometimes arise between the potential users of these multiple resources. There is regional interest in pursuing research that would prevent these conflicts, or at least reduce them significantly.

Research projects initiated with these funds in fiscal year 1994 include a broad array of research which was competitively awarded within the Center concerned with best management practices, ecological characteristics, effects of different management intensities, streamside buffer zone effectiveness, and a landowner survey regarding incentive programs.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$470,000 and for fiscal year 1995, \$523,000. A total of \$993,000 has been appropriated.

During fiscal year 1993, in anticipation of work to be initiated in 1994, \$100,000 were provided by the Sturgis Foundation. During fiscal year 1994, the Sturgis Foundation

provided \$10,000 and the Ross Foundation provided \$20,000. For fiscal year 1995, \$19,200 were provided by the University of Arkansas, \$18,077 were provided by the Georgia-Pacific Corporation, and Rayonier, Incorporated provided \$185,000.

This research is being conducted at the School of Forest Resources of the University of Arkansas at Monticello. The University researchers anticipate that work may be completed in fiscal year 1998.

FRUIT AND VEGETABLE MARKET ANALYSIS, ARIZONA AND MISSOURI

The purpose is to provide timely knowledge of the impacts of trade, environmental, monetary, and other public policies and programs upon the Nation's fruit and vegetable industry to farmers, agribusinessmen, and policymakers through a program of empirical assessment and evaluation. The U.S. fruit and vegetable sector is experiencing increased growth from greater domestic and export demand. However, the growth of this sector depends upon its ability to compete domestically and internationally and to conform with the regulatory environment in which it operates. This program of research will provide information to farmers and policymakers on the implications and impacts of various policies and programs.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$329,000, and for fiscal year 1995, \$296,000. A total of \$625,000 has been appropriated.

The non-federal funding and its source to be provided to this grant in 1994 was \$50,073 State appropriations and \$11,000 industry for a total of \$61,073 and \$21,876 State appropriations and possibly as much as \$50,000 industry for a total of \$71,876 for 1995.

The work is being carried out at Arizona State University and the University of Missouri. The university researchers anticipate that work planned for this phase of the program may be completed in 1999.

GENERIC COMMODITY PROMOTION, NEW YORK

The purpose of this program is to assess and evaluate the economic effectiveness of generic commodity promotion programs and determine the impact of advertising on the demand for such commodities. Many of these efforts are funded by Federal and/or State commodity check-off programs. National and State agricultural commodity groups conduct generic promotion programs to increase sales by using check-off funds obtained from producers

under several Federal and State programs. More commodity groups are considering this approach to increase demand for their commodities in domestic and export markets. There are national and regional needs to ascertain the effectiveness of such programs because of serious reservations about their effectiveness.

The program has 18 projects underway or to be implemented with current funding addressing such issues as dairy industry generic promotion effectiveness, cross-commodity effects of commodity promotion, impacts of generic advertising of low-fat products, effects of non-price export promotion on costs of Federal price support programs for agricultural commodities, effectiveness of export promotion programs for beef and pork in Japan, effectiveness of wheat and almond promotion programs, and assessment of producer attitudes about supporting such programs. The research program is closely coordinated with the Agricultural Marketing Service, several State departments of agriculture, and producer commodity groups.

The work supported by the grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$235,000 and for fiscal year 1995, \$212,000. A total of \$447,000 has been appropriated.

The non-federal matching funds and sources allocated to this grant by Cornell University are \$18,500 in State appropriations for 1994 and \$46,688 in State appropriations for 1995. Collaborating institutions performing work under subcontractual agreements have not been able to provide information.

The work is being carried out at Cornell University in collaboration with several other land-grant universities. The university researchers anticipate that work planned for this phase of the program may be completed in 1999.

GLOBAL CHANGE

Radiation from the sun occurs in a spectrum of wavelengths, with a majority of wavelengths being beneficial to humans and other living organisms, and a very small portion in the shorter wavelengths being harmful. This harmful part of the solar spectrum is collectively known as the Ultraviolet part of the spectrum and is called UV-B for a short name. Until a few years ago this part of the sun's radiation was of little concern because the layer of ozone in the stratosphere absorbed a significant portion of the UV-B energy. The discovery of deterioration of the stratospheric ozone layer by man-made chemicals resulted in the very urgent need to determine the amount of UV-B radiation reaching the earth's surface and to learn about the effects of this changing

environmental force. The Canadians have been monitoring UV-B for a few years and have clear documentation of increased levels of UV-B radiation. The United States is believed to be receiving similar radiation changes, but we have only begun to establish a network to monitor UV-B radiation. The Cooperative State Research, Education, and Extension Service, CSREES, is in the process of establishing a network for monitoring UV-B radiation which will meet the needs of the science community of the United States, and will be compatible with similar networks throughout the world. This grant is part of a government-wide initiative. The research is closely coordinated with other Federal agencies involved in the U. S. Global Change Research Program.

Destruction of the stratospheric ozone layer, our shield from the full intensity of solar radiation, continues to increase. This creates a high priority need for information documenting the levels of UV-B radiation reaching the ground. The United States, and the rest of the world, needs to know the strength of the UV radiation reaching the earth and potential impacts on all forms of life.

The network is to provide accurate, geographically dispersed data on UV-B radiation reaching the surface of the earth and to detect trends in this type of radiation.

A grant to design and build advanced spectroradiometers was awarded under the National Research Initiative Competitive Grants Program. These instruments are to be used in the research network to make precise measurements of UV-B radiation at selected sites. The first of these instruments is undergoing testing and calibration by the National Institute of Science and Technology before being installed at a field location. Five additional instruments are being readied for calibration and field installation. Concurrently, instruments of a different design and lower cost are being developed for use in the climatological network. Until these new instruments are tested and available for field use work on establishing field sites is moving forward. To gain network experience several broadband instruments have been purchased and installed at ten selected field sites. Data from these sites are being transmitted to Colorado State University for analysis, archiving and distribution. These data are available through an Internet World Wide Web Center located at Colorado State University. The Department of Agriculture network is part of the United States Interagency In-Situ Ultraviolet Radiation Monitoring Network, and also cooperates closely with the Canadian UV network to avoid site duplication and to share knowledge.

The work supported by this grant began in fiscal year 1992, and the appropriation for fiscal years 1992 and 1993 was \$2,000,000

per year; fiscal year 1994 was \$1,175,000; and fiscal year 1995 is \$1,625,000. A total of \$6,800,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$162,253 state appropriations in 1993; \$183,106 state appropriations in 1994; and \$285,430 provide by Colorado State University in 1995.

Colorado State University is managing the operating network, which when completed will include all regions of the country. In the climatological network thirty sites are planned, including Hawaii, Alaska, and Puerto Rico to provide broad geographic coverage. Several sites have been selected thus far and they are located in California, Colorado, Georgia, Illinois, Maine, Michigan, New Mexico, New York, Ohio, and Washington. The Research level network will begin with the first instrument to be installed at the Department of Energy site near Ponca City, Oklahoma as part of the Atmospheric Radiation Measurements field work. As with other weather and climate observations, this network will be an ongoing need. These measurements will provide information on the nature and seriousness of UV-B radiation in the United States and will relate our conditions to the global situation.

GLOBAL MARKETING SUPPORT SERVICES, ARKANSAS

The purpose of this grant is to develop a research and service program to support agribusiness development of international markets. The objective of the university research is to develop appropriate data bases and methods to identify potential foreign markets for Arkansas products and conduct and disseminate foreign market assessment and evaluation studies to agribusiness firms.

Data sets have been acquired and methods developed to identify potential markets for specific products. Research has been initiated to assess markets for rice, poultry, and soybeans in Mexico and China and assess the implications of the General Agreement on Tariffs and Trade and North American Free Trade Agreement on trade in those commodities.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$47,000 and for fiscal year 1995, \$92,000. A total of \$139,000 has been appropriated.

The non-federal funds and sources provided for this grant are \$90,000 per year in State appropriations for 1994 and 1995.

This research is being conducted at the University of Arkansas, Fayetteville. The principal researcher anticipates that the project will be completed in 1999.

GRASS SEED CROPPING SYSTEMS FOR SUSTAINABLE AGRICULTURE

This program was developed to provide management systems for sustainable grass seed production without field burning of the straw residue following harvest which results in adverse air quality problems. Grass seed yields are often significantly reduced the following season if the residue is not burned. According to information provided by technical committees representing researchers and the grass seed industry the regional need for this research is to develop sustainable systems of seed production that do not depend on field burning of straw residue. Much of the grass seed for the U.S. including lawn grasses is produced in the area.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$470,000, and for fiscal year 1995, \$423,000. A total of \$893,000 has been appropriated. The nonfederal support for this project in fiscal year 1994 was \$266,055, state appropriations.

The research will be conducted by the three state agricultural experiment stations in Idaho, Oregon and Washington. The university researchers anticipate that work may be completed in fiscal year 2001.

GREAT PLAINS AGRICULTURE POLICY CENTER, OKLAHOMA

The purpose of this program is to conduct research on the impact of Federal farm policies on the agricultural sector and rural areas in the Great Plains States. Policies to be analyzed include planting flexibility, post-Conservation Reserve Program land-use, conservation compliance, and wetlands. The investigators have collected the necessary data and are currently developing and testing the analytical models. The proposal indicates a regional need to provide timely assessments and evaluations to policymakers, farmers, community leaders, and other interested parties of the impacts of various farm policies, including the conservation reserve, wetland, conservation compliance, and cost-sharing assistance programs for farmers. Changes in these programs are expected to have significant economic impacts requiring farmers and rural economies to make appropriate adjustments.

The original goal was to conduct research on the impacts of the Federal farm programs on the Great Plains with the work being conducted jointly by Kansas and Oklahoma.

The researchers developed a plan-of-work to develop the data collection and analytical framework to carry out the purpose of this program. Analytical methods have been selected, are being developed and tested, and data collected and compiled. Plans are to complete development of the models and proceed with analysis. Results to date indicate that the Great Plains and Corn Belt State farmers will return 19 million acres of Conservation Reserve Program land to production. Reduced chemical use of nitrogen and phosphorus, 14 percent and 17 percent respectively, had no effect on yield. Additional studies on changes in farm program provisions will be completed as empirical methods are completed.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992 and 1993 was \$100,000 per year; fiscal year 1994, \$47,000; and fiscal year 1995, \$42,000. A total of \$289,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$102,530 State appropriations, \$5,198 product sales, and \$2,851 miscellaneous for a total of \$110,579 in 1992; \$118,328 State appropriations, \$1,751 product sales, and \$1,849 miscellaneous for a total of \$121,928 in 1993; \$35,395 State appropriations in 1994; and \$7,000 State appropriations in 1995.

The research program is being carried out at Oklahoma State University. The researchers anticipate that this phase of the program will be completed in 1996.

HUMAN NUTRITION, IOWA

Research efforts are focused on development of new foods to improve nutritional quality; to identify naturally occurring food components--protectants, toxicants and non-nutritive factors--which may improve nutritional status and decrease health risks; and to develop the means to modify consumer food selection. Opportunities exist to affect the production of various commodities, to augment their modification and integration into new foods, and to evaluate their impact on the nutritional status of the individual and the population. The research addresses the broad areas of food quality, nutrition and optimal health. The challenge is to meet nutritional goals while maintaining or enhancing the quality of the foods produced and manufactured for consumers. The results of these efforts could enhance production, provide economic benefit

and complement processing needs to enhance stability and quality of foods.

The overall goal of the Center for Designing Foods to Improve Nutrition, where the grant is administered, is to promote nutritional assurance and health maintenance. Their goal is to develop an improved understanding of the bases of food selection and consumption and of nutrient utilization which will be further coordinated with production, processing and distribution of food. The additional goal of designing new food products to enhance nutritional quality of the food supply provides a unique opportunity to work with commodity groups, the food industry and health professionals to successfully achieve these goals.

A major effort supported by grant funds was to alter the fat content and composition of beef, pork, and soybeans. In an effort to modify pork to better meet human health needs, several approaches were used. Treatment of pigs with porcine somatotropin resulted in leaner chops and loins without a loss in tenderness, juiciness or flavor. Evaluation of genetically bred pigs also resulted in identification of subpopulations having leaner tissue with acceptable tenderness. In addition, pigs fed elevated polyunsaturated soy oil resulted in a proportional increase of meat polyunsaturated fatty acids. When the meat and lard were used in controlled dietary feeding experiments, serum cholesterol levels of college students were decreased during the eight week experiment, indicating this modified pork could contribute to a healthier human diet. A similar experiment in beef produced a two fold increase in muscle polyunsaturated fatty acid concentration without affecting sensory quality when cattle were fed ground soybeans.

Another research team modified the composition of soybean oils and the presence of the oxidative enzyme, lipoxygenase, by genetic modification. The oils had lower linolenate fatty acid composition and were more stable during storage.

Identification and characterization of natural protectants and toxicants is another program area. Soy isoflavones were determined to suppress dimethylnitrosamine induced carcinogenesis in rats and increased the natural killer cell activity. Retinoic acid and retinoic acid glucuronide have been associated with a regulatory effect on cancer cells. The synthesis of retinoic acid glucuronide was shown to be regulated specifically by multiple isozymes. Differences have also been determined for absorption of different carotenoids in human subjects, indicating unique specificity. Altered biological availability may contribute to lowered risks found in some populations consuming large amounts of

fruits and vegetables. These are only a few of the findings generated from the research supported through the Center.

The work supported by this grant began in fiscal year 1991 with an appropriation of \$300,000. The fiscal years 1992-1993 appropriation was \$500,000 per year; \$470,000 in fiscal year 1994; and \$473,000 in fiscal year 1995. A total of \$2,243,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$293,000 university, \$312,869 industry, and \$14,000 miscellaneous in 1991; \$90,000 state appropriations, \$473,608 university, \$131,160 industry, and \$116,560 miscellaneous in 1992; \$307,500 state appropriations, \$472,081 university, and \$222,267 industry in 1993; and \$486,000 university, and \$254,000 private in 1994.

Research is being conducted at the Center for Designing Foods to Improve Nutrition, Iowa State University. The university researchers anticipate that current work may be completed in fiscal year 1995.

HUMAN NUTRITION, LOUISIANA

A series of studies on the differences in dietary fats is under active investigation at the Pennington Biomedical Research Center at Louisiana State University. This project consists of three different groups of studies. The first group deals with the effects of different diets on the oxidation of individual fatty acids which are found in foods or made during preparation of fats for human consumption. The second set of studies examines the effect of raising or lowering the amount of fat in the diet on the food choices and metabolic changes that people make. The final group is testing the effects of increasing the amount of fish oil in the diet on the risks for heart disease. The research addresses the broad areas of food quality, nutrition and optimal health. The information about the nutritional effects of total fat and of specific fatty acids is important as the health system focuses on preventing chronic diseases.

The overall goal of this grant is to test the hypothesis that dietary fats have varying metabolic effects. To date, oxidation of 14 fatty acids has been studied in four males on a usual fat diet and the metabolism of eight fatty acids has been studied in four males and four females on a low fat diet. Additional studies with women on the high fat diet and in subjects eating a diet with a high ratio of polyunsaturated to saturated fatty acids are underway. Metabolism of polyunsaturated fatty acids also has been

studied in subjects consuming fish oil. Two feeding studies with supplemental fish oils have been completed and a third is being planned. Studies on the effects of depleting subjects of carbohydrate on the choice of carbohydrate or fat foods have been completed, as have the studies depleting subjects of fat and measuring their intake of carbohydrate or fat foods. The first group of studies substituting indigestible fat for digestible fat on human metabolism are complete. Studies on metabolism during exercise and high and low fat diets are underway.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal years 1991-1993 was \$800,000 per year; for fiscal years 1994-1995 was \$752,000 per year. A total of \$3,904,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$523,100 state appropriations in 1991; \$515,100 state appropriations and \$2,216,606 private in 1992; \$536,100 state appropriations and \$940,000 private in 1993; and \$627,000 state appropriations and \$3,775,000 private in 1994.

Research will be conducted at the Pennington Biomedical Research Center, Louisiana State University. The university researchers anticipate that current work may be completed in fiscal year 1995.

HUMAN NUTRITION, NEW YORK

The researchers are addressing the nutritional roles of plant foods in the human diet and the impacts on the food system. Basic research investigations focus on the metabolic roles of selected fatty acids, sulfur-containing amino acids, vitamin A and its precursor beta-carotene, and dietary fiber. Improvement in methods to validate self-reported food intake is also included. Another group of investigations target the successful transfer of knowledge to communities focusing on overcoming the putative resistance of school children to the consumption of plant-based foods; dietary risk factors among Hispanic/Latino families; and an integrated analysis of plant food use. The objective is to develop a comprehensive, research-based, conceptual framework for the design and evaluation of interventions to substantially increase plant food consumption. The research addresses the broad areas of food quality, nutrition and optimal health. The U.S. Department of Agriculture --USDA-- and the Department of Health and Human Services --DHHS-- have promulgated dietary guidelines which give greater prominence to plant foods than has been the case in the past. If these guidelines are adopted by all segments of the population to the degree that is recommended, the impact on our

food system will be significant. This project aims to enhance the implementation of dietary guidelines by development of a regional food guide and to promote agricultural products of the Northeast.

Current dietary recommendations embodied in the "Pyramid" and the Dietary Guidelines for Americans places increased emphasis on the consumption of foods of plant origin. The recommended shift in American dietary patterns will have enormous impact on our food system if it is implemented. This work is designed to integrate the activities of faculty in the basic, clinical, community education and policy arenas in developing new information to evaluate those recommendations and in evaluating the consequences of their implementation. The objective is to develop a comprehensive, research-based, conceptual framework for the design and evaluation of interventions to substantially increase plant food consumption.

A partial list of accomplishments follow. Regulation of glutathione synthesis appears to be independent of the regulation of cysteine catabolism. This finding is important to key issues relevant to anti-oxidant metabolism. Plasma selenium concentration was observed to be related inversely to subsequent total cancer incidence, but only among subjects with vitamin E concentrations below the study's population median value. Beta carotene is efficiently converted to vitamin A in well-nourished individuals indicating that this conversion is poorly regulated, at least at low intakes of carotene in individuals with good vitamin A status. Cornell and USDA staff jointly evaluated measurements of food sufficiency, hunger and food insecurity, and a module for the Current Population Survey was designed to estimate the prevalence of hunger and insecurity. A regional food guide to aid consumers select seasonally available products and meet dietary guidelines was developed and is undergoing evaluation.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$450,000; fiscal years 1990-1991, \$556,000 per year; fiscal years 1992-1993, \$735,000 per year; fiscal year 1994, \$691,000; fiscal year 1995, \$622,000. A total of \$4,345,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$154,056 state appropriations and \$2,456 private in 1991; \$238,430 state appropriations and \$60,746 private in 1992; \$19,401 state appropriations and \$22,083 private in 1993; and approximately \$202,441 state appropriations and \$1,175 private in 1994.

Research is being conducted at Cornell University, New York. The university researchers anticipate that work may be completed in 1999.

ILLINOIS-MISSOURI ALLIANCE FOR BIOTECHNOLOGY

The Illinois-Missouri Alliance has proposed to initiate a competitive grants program in agricultural biotechnology for research in targeted areas of priority, industrial opportunity, and need. The Alliance proposed to solicit research project proposals from scientists at member institutions, and will conduct peer reviews for science quality and commercial reliance to select the proposals that will be funded. The principle investigator has indicated the goal of the Alliance is the pre-commercial development of emerging biotechnology discoveries for agriculture. This is the first year of the Alliance.

The work supported by this grant begins in fiscal year 1995 and the appropriation for fiscal year 1995 is \$1,357,000.

At this stage in the Alliance's development, plans have not been elaborated for securing non-federal funding.

The research will be conducted at the University of Illinois and the University of Missouri. We have asked that this information be included in the requested proposal.

IMPROVED DAIRY MANAGEMENT PRACTICES, PENNSYLVANIA

The research focuses on developing methods to help dairy farmers in the adoption of new technology and management practices which lead to improved dairy farm profitability. The local need is the identification and implementation of profit enhancing management strategies for Pennsylvania dairy farms in response to changing market conditions and emerging technologies. The current focus is to develop economically-viable solutions to issues confronting Pennsylvania dairy farmers such as dealing with animal waste in an environmentally-friendly manner, reducing the cost of forage production systems, including grazing systems, and to develop a better understanding of decision processes by dairy farmers.

A farm management survey is complete and analysis of results is in progress. Farm financial models have been developed and are undergoing field test on selected farms. Workshops to teach elements of business management to dairy farmers have been conducted, and survey instruments are in place to monitor effectiveness of workshops. Research is currently underway to

develop improved models for nutrient management on northeastern dairy farms, to evaluate the potential role of intensive grazing systems to replace harvested forage, and to better understand how decisions are made by dairy farm families.

The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was \$335,000 per year. The fiscal year 1994 appropriation was \$329,000 and \$296,000 in fiscal year 1995. A total of \$1,295,000 has been appropriated.

During fiscal year 1992, \$354,917 were for State funds, and \$16,000 for Industry, for a total of \$370,417. During fiscal year 1993, \$360,374 were for State funds and \$16,000 for Industry for a total of \$376,374. Information is not yet available for fiscal year 1994.

Research is being conducted at Pennsylvania State University. The university researchers anticipate that work currently underway will be completed in July, 1996.

IMPROVED FRUIT PRACTICES, MICHIGAN

This research will involve a multidisciplinary approach on apple, blueberry, and sour cherry, three important Michigan fruit crops. Research will be conducted on crop management techniques and reduced chemical use. Michigan's need for this research is to develop research to maintain/expand their tree fruit and small fruits industry. The planned objectives of the research are to reduce the chemical contamination of the environment from fruit production through multidisciplinary research on reducing chemical usage, including pesticides, and the development of new nonchemical fruit production methods.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$494,000, and for fiscal year 1995, \$445,000. A total of \$939,000 has been appropriated.

The nonfederal funds and sources provided for this grant in fiscal year 1994 were \$437,338 from state appropriations and \$135,000 from industry and proposed for fiscal year 1995 are \$574,494 from state appropriations and \$127,000 from industry.

Research will be conducted at Michigan State University. The university researchers anticipate that work may be completed in fiscal year 1998.

INTEGRATED PEST MANAGEMENT/BIOLOGICAL CONTROL

Research supported by Integrated Pest Management --IPM-- competitive special grants provides the science basis for alternative approaches for managing insects, diseases, weeds, and nematodes and the integration of these alternatives into IPM systems. Emphasis of the program continues to be on enhanced natural control. In fiscal year 1994, biological control research received 56.1 percent of the total support; cultural control and applied ecology, 10 percent, and host resistance, 4.6 percent. The integration of two or more tactics to suppress pest populations received 19.1 percent of the total support. Research on behavior modifiers --pheromones--, application technology, resistance management, and movement and dispersal of biotic agents was also supported. This research is being conducted on field crops, 31 percent, vegetables, 22 percent, urban environs, 13 percent, fruits/nuts, 2 percent, cropping systems research, 9 percent, livestock/range and forage, 8 percent, and forests, 4 percent.

This research has highest national, regional, and state priority. The Secretary's December 14, 1994, press release announced an aggressive Integrated Pest Management initiative to provide farmers with the new tools they need to deal with environmental and economic challenges into the 21st century. USDA IPM research and education programs will be directed to serve the priorities for IPM adoption set at the regional and local levels as exemplified by this IPM special grants program. Background for the news release states, "IPM systems have a proven track record of ensuring economical pest control and incorporating environmental data in decision-making. USDA's Initiative builds upon that experience..." I issued a letter on January 12, 1995, to the Deans, Directors of Research and the Cooperative Extension system, and to the Research Directors of 1890 Land-Grant Colleges and Universities outlining the major role the Cooperative State Research, Education, and Extension Service and partner Land Grant expertise played in the development of the USDA's IPM Initiative and the execution of this initiative. The Land Grant Universities and CSREES needs to: 1) develop and be essential members of IPM implementation teams; 2) develop innovative new solutions to priority pest problems faced by farmers and other pest managers; and 3) provide education and training programs that are essential to ensuring widespread implementation of IPM systems throughout the United States. This IPM Special Research Grants program has the lead responsibility to develop innovative new solutions to priority pest problems faced by farmers and other pest managers and has the proven network and track record to accomplish this goal. In addition to this IPM Competitive Special Grants Program, the National Research Initiative will continue to support the

fundamental research on which developmental research is based. The principal researcher believes this research to be of national, regional or local need.

The goal of the CSREES IPM Special Grant program has been and continues to be to develop and implement alternatives to pesticides in a biologically and ecologically based IPM system that will minimize the need for pesticide use and enhance agricultural productivity. Specific examples of past research that will be further developed under the FY 94 IPM Special Grants follow:

Cropping Systems: Scientists from Wisconsin have developed Crop and Pest Management Software for Farming Systems Involving Potatoes. Total input savings of \$84.20 per acre represent reductions of 9.75 pounds of pesticide active ingredients per acre, 50 pounds of nitrogen, and 2.1 inches of irrigation water. The program is currently used on 70,000 acres in a multistate area.

Vegetables: (a) The devastating potato virus Y can be managed by the use of crop borders of soybeans where aphid vectors land first and lose the virus by the time they reach potatoes. (b) Plowing down green manure crops, e.g. Sudangrass, for a minimum of two consecutive years and reducing early season irrigation inputs can suppress potato early dying (PED) while reducing environmental risks. (c) *Bacillus thuringiensis* and *Streptomyces* sp. applied as a slurry seed treatment or soil drench reduced root galling severity caused by northern root-knot nematode and increased yield of tomatoes and peppers.

Field Crops: (a) Incorporation of rapeseed crop residues in wheat have shown promise for reducing soil borne plant pathogens, insect pests, and weed seeds through production and release of inhibitory glucosinolate degradation products; (b) The predator *Orius* and some parasitic wasps of the sweetpotato whitefly have been demonstrated to have a high tolerance for the insecticide endosulfan in alfalfa. This allows spraying without killing the whiteflies' natural enemies; (c) Methods have been developed to culture the fungus *Neozygites fresenii* and store the fungus for up to one year before use as a biological agent to suppress cotton aphids.

Livestock/Range: It has been demonstrated that specific brush management practices benefit cattle production by enhancing forage production, by reducing populations of certain species of ticks and by reducing the reproductive potential of horn flies in manure droppings.

Fruit: (a) Fire blight resistant apple rootstocks have been developed and introduced to nurseries. Transgenic plants for increased fire blight resistance are undergoing field trials; (b) Mating disruption provides control of tufted apple budmoth (TABM) under low populations. A generic blend of pheromone components shut down response of 3 other pest leafrollers. A 4-5 fold increase in parasitoid activity occurs

over conventionally treated blocks. Urban: Models that predict cockroach abundance and suggest habitat modifications and placement of pesticides reduce cockroach abundance and pesticide use, and increase the period of control.

Grants have been awarded from funds appropriated as follows: fiscal year 1981, \$1,500,000; fiscal years 1982 through 1985, \$3,091,000 per year; fiscal years 1986 through 1989, \$2,940,000; fiscal year 1990, \$2,903,000; fiscal year 1991, \$4,000,000; fiscal years 1992 and 1993, \$4,457,000 per year; fiscal year 1994, \$3,034,000; and fiscal year 1995, \$2,731,000. A total of \$47,206,000 has been appropriated.

Non-federal funds for fiscal year 1991 total as follows: state appropriated - \$596,835, product sales - \$69,532, industry grants - \$40,462, and other - \$27,644. Non-federal funds for fiscal year 1992 total as follows: state appropriated - \$565,677, product sales - \$19,106, industry grants - \$10,960, and, other - \$31,577.

This research is being carried out in practically all of the State Agricultural Experiment Stations.

There is a high priority for continuation of ecologically based IPM research and for collaborative linkages with other research, extension, technology transfer, regulatory, and incentive programs to accomplish the transitions called for in the administrations's policy for reducing overall risks from the use of pesticides through integrated pest management programs which lead to more sustainable agricultural production strategies and reductions in the use of pesticides.

INTEGRATED PRODUCTION SYSTEMS, OKLAHOMA

This project focuses on the development of efficient management systems for production of watermelons and blackberry under intensively managed conditions. The work will address biotic and abiotic production components under Southeastern Oklahoma conditions for use in production guidelines. This will include planting densities, fertilizer studies, weed management and insect and disease control. The need for this research is focused on the local area of Southeastern Oklahoma, an area that is economically depressed and in need of alternative crops to diversify the dominant cow/calf livestock production. Work to date has shown promise for strawberries, blackberries, cabbage, melons and blueberries.

Work supported by this grant started in fiscal year 1984 and the appropriations were: fiscal year 1984, \$200,000; fiscal year 1985, \$250,000; fiscal year 1986, \$238,000; fiscal years 1987-1989, \$188,000 per year; fiscal years 1990-1991, \$186,000 per year; fiscal year 1992, \$193,000; fiscal year 1993, \$190,000; fiscal year 1994, \$179,000; fiscal year 1995, \$161,000. A total of \$2,347,000 has been appropriated.

The nonfederal funds and sources provided for this grant were as follows: \$165,989 state appropriations in 1991; \$160,421 state appropriations in 1992; and \$164,278 state appropriations in 1993. Nonfederal support for 1994 was \$141,850 for state appropriations.

This research is being done at the Wes Watkins Agricultural Research and Extension Center at Lane, Oklahoma, a branch of the Oklahoma State Agricultural Experiment Station. The university researchers anticipate that this work will be completed in fiscal year 1997.

IOWA BIOTECHNOLOGY CONSORTIUM

The University of Iowa, together with the City of Cedar Rapids and Iowa State University, are conducting a joint research and demonstration project to develop and test methods to turn fermentation by-products into useful new products. The intention is to reduce the burden of waste products on municipal treatment centers from bioprocessing plants, while at the same time increasing opportunities to transform waste into commercially viable products. The specific aims of the Consortium involve a general model approach to the evaluation of: managing and possible use of the waste for land application, livestock feed or anaerobic fermentation to derive alternative energy sources. The objectives of the research are to develop test methods to use fermentation of agricultural by-products to produce new products of value with the intention of reducing the burden of waste products on municipal waste systems.

The original goal of this research remains to conduct fundamental and applied research aimed at enhancing the recovery and utilization of by-product materials arising from new and emerging industries using biotechnology. Program emphasis is on fermentation of agricultural waste products through value added processing for economic and environmental benefits. The Consortium has made significant achievements in its work objectives. The Consortium is reaching out to establish a network of researchers to assist them in finding uses for the by-product streams as concentrated steepwater, and to find methods to concentrate by-products for industrial uses. The Consortium is also making good

progress in evaluating profitable uses of fats and carbohydrates through bioconversion, biocatalysis membrane concentration, and bioseparation. Another avenue of research has shown that land application of wastes streams has considerable savings and benefits for crop production. Bioprocesses have been studied for economic significance and this information is being used to establish profitable technologies. The principal researcher believes this research to be of national, regional or local need.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$1,225,000; fiscal year 1990, \$1,593,000; fiscal year 1991, \$1,756,000; fiscal year 1992, \$1,953,000; fiscal year 1993, \$2,000,000; fiscal year 1994, \$1,880,000; and fiscal year 1995, \$1,792,000. A total of \$12,199,000 has been appropriated.

Non-federal funds and sources provided for this grant were as follows: \$623,803 from the State of Iowa, \$42,813 from the city of Cedar Rapids in 1991; \$768,287 from the State of Iowa, and \$365,813 from the city of Cedar Rapids in 1992; \$858,113 from the State of Iowa, and \$170,000 from the city of Cedar Rapids in 1993; \$841,689 from the State of Iowa, and \$36,000 from the city of Cedar Rapids in 1994; and \$36,000 from the City of Cedar Rapids, \$98,725 from the University of Iowa, and \$69,700 from Iowa State University which are estimated for 1995.

Research is being conducted at the University of Iowa and Iowa State University, in collaboration with the City of Cedar Rapids. The Consortium work plan calls for completion of all research by 1995.

INTERNATIONAL ARID LANDS CONSORTIUM

Fiscal year 1994 was the first year that CSREES funded the International Arid Lands Consortium. The Forest Service supported the program during fiscal year 1993 to develop an ecological approach to multiple-use management and sustainable use of arid and semiarid lands. Projects that began in 1994 will continue to be funded to address issues of land reclamation, land use, water resources development and conservation, water quality, and inventory technology, e.g. remote sensing. The consortium is devoted to the development, management and reclamation of arid and semi-arid lands in the United States, Israel, and elsewhere in the world. The International Arid Lands Consortium will work to achieve research and development, educational and training initiatives, and demonstration projects. The founding participants are the University of Arizona, The University of Illinois, Jewish National Fund, New Mexico State University, South Dakota State

University, Texas A&M University, Kingsville, and United States Department of Agriculture's Forest Service.

The original goal of this consortium is to be acknowledged as the leading international organization supporting ecological sustainability of arid and semi-arid lands. To date, sixteen projects have been funded, twelve of which are to conduct research, three for demonstration projects, and one for an international workshop.

International Arid Lands Consortium was incorporated in 1991. Funds were appropriated to the Forest Service in 1993, and \$329,000 has been appropriated for fiscal years 1994 and 1995 for a total appropriation of \$658,000 to CSREES.

Members of the International Arid Lands Consortium have provided funds to support the consortium office in Tucson, Arizona, and for printed materials as needed. Each member has provided travel and operations support for semi-annual meetings, teleconferences, and other related activities. In fiscal year 1993, \$59,262 were provided in state appropriations and \$84,083 by industry. Amounts are not yet available for fiscal year 1994.

Research is currently being conducted at the University of Arizona, South Dakota State University, Texas A&M University, Kingsville, New Mexico State University, Hebrew University of Jerusalem, Ben Gurion University, and University of Illinois. Research projects started in 1993 will be completed within 2 years and projects started in 1994 are expected to be completed within 2-3 years. The International Arid Lands Consortium is an organization that has long-term goals that will require research and development for many years.

JOINTED GOATGRASS

The proposal calls for research on control systems for jointed goatgrass in wheat production including integrated cultural management, seed bank studies, and modeling for management conducted as sub-projects by several states. The premier research project is an "Integrated Management" study being conducted across nine states in the midwest and west. In this study, jointed goatgrass management is being evaluated based on planting dates, planting density, economic thresholds, and competitive varieties. Research is also being conducted on crop rotations, biological control, jointed goatgrass seed production and spread, and the development of computer-based decision aids. All funded work in this program has a technology transfer plan and a national coordinator for technology transfer to insure that growers are

fully informed about all options for managing this devastating weed. Four grower workshops across the west are underway for January and February 1995. To maximize cooperation among scientists, an annual meeting is held among all investigators and the national steering committee to strengthen collaborations and optimize the distribution of limited funds. Jointed goatgrass infests nearly five million acres of winter wheat in the west and midwest and is spreading unchecked. It costs U.S. wheat growers an estimated \$145 million annually. Control of jointed goatgrass in wheat is impossible with current methods because it is a genetic cousin of wheat, and because its seed survives in the soil for five years. Jointed goatgrass has increased rapidly in the past 20 years because of the widespread adoption of conservation tillage systems. However, because jointed goatgrass proliferates in such reduced tillage systems, it seriously impedes the universal adoption of such practices. The research has a national need and will involve scientists from other states.

The goal of this project is to reduce the devastating effect of jointed goatgrass on wheat production and quality and to prevent its continued spread into new areas.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$329,000, and for fiscal year 1995, \$296,000. A total of \$625,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$82,198 state appropriations, \$82,256 from industry and \$14,871 miscellaneous for fiscal year 1994.

Coordinated and cooperative research will be conducted by University and USDA/Agricultural Research Service scientists in the states with serious infestations including Washington, Colorado, Kansas, Nebraska, Oklahoma, Utah, Oregon, Idaho, Montana, Wyoming, and South Dakota. The university researchers anticipate that the work may be completed in fiscal year 1999.

LIVESTOCK AND DAIRY POLICY, NEW YORK AND TEXAS

The purpose of this grant is to assess the possible economic impacts on the U.S. livestock, poultry, and dairy sectors from various macroeconomic, farm, environmental, and trade policies and new technologies. Both Cornell University and Texas A&M University conduct analyses of these policies and disseminate the information to policymakers, farmers, and agribusinessmen. Cornell University focuses on dairy policies, and Texas A&M University focuses on policies affecting livestock and poultry. Information on the implications of new and alternative farm, trade, and macroeconomic

policies affecting the livestock and dairy sectors is of special interest to policy-making officials, farmers, and others. Such information enables farmers and agribusinessmen to make necessary adjustments to their operations to enhance profitability and for public officials to consider alternatives to sustain adequate supplies and minimize public programmatic costs.

The original goal was to establish a specialized research program that could provide timely and comprehensive analyses of numerous policy and technological changes affecting livestock and dairy farmers and agribusinessmen and advise them and policymakers promptly of possible outcomes. The capability to achieve this goal has been achieved. This program continues to provide timely assessments and evaluations of provisions and proposed changes in the 1990 Food, Agriculture, Conservation, and Trade Act, the General Agreement on Tariffs and Trade, and the North American Free Trade Agreement; various income and excise tax measures; alternative pricing measures for milk; a target price income support program for wool; and technological innovations such as the bovine growth hormone. Both institutions maintain extensive outreach programs to disseminate results throughout the United States. The program has updated its analytical capability and begun analyses of policy options for the forthcoming 1995 farm bill.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$450,000; fiscal year 1990, \$518,000; fiscal years 1991-1993, \$525,000 per year; fiscal year 1994, \$494,000; and fiscal year 1995, \$445,000. A total of \$3,482,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$37,420 State appropriations in 1991; \$162,086 State appropriations and \$133,278 product sales for a total of \$295,364 in 1992; and \$301,817 State appropriations, \$1,412 industry, and \$7,121 miscellaneous for a total of \$310,350 in 1993; \$24,702 State appropriations, and \$5,961 industry for a total of \$30,663 in 1994; and \$235,526 State appropriations for 1995.

The research is being conducted at Cornell University and Texas A&M University. The principal researchers indicate that this program is of a continuing nature for the purpose of assessing existing and proposed policy issues affecting the livestock and dairy industries.

LOWBUSH BLUEBERRY RESEARCH, MAINE

Interdisciplinary research is being conducted on many aspects of lowbush blueberry culture and marketing including irrigation.

fertilization, postharvest methodology, pests and fruit bud cold hardiness. Maine produces the majority of the lowbush blueberries grown in the U.S., therefore, this work is of major local interest. However, blueberries are an important national fruit commodity and this work helps to maintain its availability.

The original research goal was to provide research answers to the numerous industry production, pest and postharvest fruit problems. Research to date indicates that berries from irrigated plots were larger and softer, and the amount of cold weather blueberry flower buds can withstand has been determined. A new method has been devised to apply herbicides that reduce injury to blueberry plants. Boron and phosphorus can increase yields. Potassium may increase winter hardiness of lowbush blueberry plants, alfalfa leafcutter bees can improve the pollination and yields of blueberries, and chlorinated wash water reduces postharvest fruit spoilage.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, \$170,000; fiscal year 1991, \$202,000; fiscal years 1992 and 1993, \$185,000 per year; fiscal year 1994, \$208,000; and fiscal year 1995, \$220,000. A total of \$1,170,000 has been appropriated.

The nonfederal funds and sources provided for this grant were as follows: 1991, \$48,919 state appropriations, \$55,980 industry; 1992, \$51,071 state appropriations, \$48,654 industry; 1993, \$56,493 state appropriations, \$60,885 industry; 1994, \$57,238 industry and proposed for 1995 \$110,716 industry support.

Research is being conducted at the University of Maine. The university researchers anticipate that the work may be completed in fiscal year 1995.

LOW-INPUT AGRICULTURE, MINNESOTA

This project continued research in fiscal year 1994 on soil-specific crop management systems that match fertilizer and herbicide applications to variable soil conditions to minimize off-farm inputs and protect the environment while maintaining a sustainable, profitable agriculture. New studies were started in 1994 to map crop yields to optimize crop management and nutrient inputs; to map soil conditions using on-the-go soil sensors and relating those conditions to crop yields; and to develop decision-support systems to evaluate these practices to improve nitrogen-use efficiency. The increasing use of agricultural chemicals has raised increasing concern about their movement into surface and

groundwater. This has increased the need for low-input, site-specific agricultural systems that will generally meet local needs.

The original overall goal of this research is to understand and model soil properties that relate to spatial variability in the agricultural ecosystem to optimize soil management. Research on this project has highlighted the differences in crop growth due to soil variability in fields, which were greater during seasons with extreme weather conditions, and also showed the potential benefits of soil-specific management practices to optimize inputs. Corn yields were shown to respond significantly to nitrogen fertilizer application rates when averaged across soil types. Soybean yields differ with tillage and crop residue management systems on well-drained soils. Other studies have shown corn yields to differ significantly with plant population and corn seed hybrid across soil types. Results of this site-specific research have been transferred to farmers and other users through field days, demonstrations, and both technical and popular publications. Two brochures were prepared, one for technical personnel and the second for producers, which summarizes the results of site-specific management on profitability and environmental quality.

Grants have been awarded from funds appropriated as follows: fiscal years 1988 and 1989, \$100,000 per year; fiscal year 1990, \$148,000; fiscal year 1991, \$174,000; fiscal years 1992-1993, \$230,000 per year; fiscal year 1994, \$216,000; and fiscal year 1995, \$195,000. A total of \$1,393,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$31,841 state appropriations, \$2,380 industry, \$13,489 miscellaneous in 1991; and \$10,614 state appropriations, \$793 industry, and \$4,497 miscellaneous in 1992. The information on non-federal funds and sources for fiscal years 1993 and 1994 is not yet available from the University of Minnesota.

The research is being conducted by the Department of Soil Science at the Minnesota Agricultural Experiment Station, University of Minnesota. It is anticipated the work may be completed in fiscal year 1996.

MAPLE RESEARCH, VERMONT

Maple research focusses on sugar maple trees and their management in the production of sap from which to make maple syrup and related maple food products. Initial efforts concentrated on effects of insufficient water for good tree health, with the goal of learning how water moves from the soil into and through the tree, affecting tree growth and sap production. Maple trees in

Vermont and the Northeast exhibited symptoms of decline. The relationship of acid precipitation was investigated to evaluate damages to maple trees from this source. A large fertilizer experiment was established to determine the effectiveness of various fertilizer combinations in improving the health of declining maple trees. During the past year a serious concern about the amount of lead in finished maple products has arisen and is being investigated. The decline and dieback of maple trees in the Northeast has been a major concern of the maple industry for several years. The causes of decline and dieback need to be understood and management practices developed to counteract these problems, which threaten to become economically severe. This program of research is designed to meet the needs of the maple industry from the scientific aspects of the industry. Last year a problem with the amount of lead in some maple syrup developed, and through the news media, caused public alarm. This program has now added the lead problem to the other matters currently being investigated.

The goal of this research is to conduct research on maple tree physiology, management of sugar maple stands, and related aspects of the maple industry to benefit the maple industry in Vermont and the Northeast.

Much has been learned regarding tree physiology in response of maple trees to varying soil moisture and other environmental conditions. Recently, studies of photosynthesis rates in relation to leaf nitrogen were found to be strongly positive, and the relation to leaf calcium and magnesium contents were less positive.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, \$100,000; fiscal years 1986-1987, \$95,000 per year; fiscal years 1988-1989, \$100,000 per year; fiscal years 1990-1993, \$99,000 per year; fiscal year 1994, \$93,000; and fiscal year 1995, \$84,000. A total of \$1,063,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follow: \$52,220 state appropriations, and \$10,345 product sales in 1991; \$49,450 state appropriations, and \$18,950 product sales in 1992; \$49,575 state appropriation, and \$23,860 product sales in 1993; and \$44,543 state appropriation, \$29,321 product sales, and \$25,000 local support in 1994; for fiscal year 1995 it is estimated that product sales will provide \$25,000, state appropriations \$57,000, and local support \$20,000.

This research is being conducted at the Vermont Agricultural Experiment Station. Research planned for fiscal year 1995 has added the problem of lead found in maple syrup to the work begun in

mechanisms of maple sap exudation and root physiology. It is anticipated that this work may be completed in 1999.

MICHIGAN BIOTECHNOLOGY INSTITUTE

The objective of the Michigan Biotechnology Institute's research program is to develop bioprocessing technology to manufacture products from agricultural raw materials. In this context, bioprocessing may include a fermentation, an enzymatic step, chemical catalysis, or physical modification of agricultural raw materials. The objective of this research is to develop bioprocessing technology to manufacture products from agricultural raw materials, thereby increasing their utilization and reducing agricultural commodity surpluses.

The original goal of this research remains to provide a return on the investment by choosing market-viable technologies developed through new companies, new jobs, and additional tax revenues produced for state, local, and federal governments. Michigan Biotechnology Institute has succeeded in developing a number of bioprocesses to produce chemicals: food ingredients, polymeric materials, and industrial feed stocks in the four focus areas that make up the Institute's overall program for bioprocessing of agricultural raw materials. The food ingredients include a no sodium and no potassium salt substitute. Michigan Biotechnology Institute has developed new formulations for bio-based solvents, a natural cherry flavor, natural succinic-acid from corn by fermentation and dietary fibers from modified corn bran. Polymeric materials include biodegradable starches that can be used in injection molding and cast film extrusion and biodegradable zein products that can be used as coatings to paper, that are still recycled. Michigan Biotechnology Institute has also been developing biocomposites that can be injection molded, such as materials using waste wood and pecan shells. Biocatalytic processes include a demonstrated method for improved glucose manufacturing and thermal stable cellulose. Many of these products are being explored for commercial development through licensing agreements with industrial partners.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$1,750,000; fiscal year 1990, \$2,160,000; fiscal year 1991, \$2,246,000; and fiscal years 1992-1994, \$2,358,000 per year; fiscal year 1994, \$2,217,000; fiscal year 1995, \$1,995,000. A total of \$15,084,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$1,750,000 in State of Michigan appropriations, \$160,000 from industry, and \$1,000,000 from miscellaneous in 1991;

\$1,750,000 in State of Michigan appropriations, \$175,000 from industry and \$1,000,000 in miscellaneous in 1992; \$1,750,000 in State of Michigan appropriations, and \$100,000 from industry in 1993; \$1,750,000 in State of Michigan appropriations, \$175,000 from industry and \$100,000 miscellaneous in 1994; and \$1,650,000 in State of Michigan appropriations and \$1,000,000 from industry in 1995.

The research is being conducted on the campus of Michigan State University at the Michigan Biotechnology Institute. The Institute has reported specific milestones that they intend to accomplish within the five year period ending in fiscal year 1995. Michigan Biotechnology Institute has kept to that timetable and it's anticipated that they will be able to complete the work on schedule.

MIDWEST ADVANCED FOOD MANUFACTURING ALLIANCE, NEBRASKA

The stated purpose of the Midwest Advanced Food Manufacturing Alliance is to expedite the development of new manufacturing and processing technologies for food and related products derived from United States produced crops and livestock. The Alliance is being formed between research scientists in food science and technology, food engineering, nutrition, microbiology, computer science, and other relevant areas from 13 leading Midwestern universities and private sector researchers from numerous U.S. food processing companies. Specific research projects are awarded on a competitive basis to university scientists with matching funds from non-federal sources for research involving the processing, packaging, storage, and transportation of food products. The food manufacturing industry is the number one manufacturing industry in the United States. Opportunities for trade in high value processed food products will grow exponentially on a worldwide basis.

Due to the rescission of funds from the USDA budget in early 1994, there was a delay in the initiation of this project. The goal was to conduct a research proposal competition among faculty from the 12 participating universities to fund research projects where matching funds were available from industry. The call for research proposals was issued in late August of 1994. By the early November deadline for receipt of proposals, 29 proposals were received from 11 of the 12 participating universities requesting a total of \$936,311. After the rescission of USDA funds, a total of \$390,000 was available for funding of competitive research projects. The proposals were sent out for review to a group of independent scientists to critique the quality of the science and the relevance to the food industry.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$470,000, and for fiscal year 1995, \$423,000. A total of \$893,000 has been appropriated.

The 29 proposals under current consideration have identified a minimum 1:1 match of funding from the food industry, industry trade associations, and state appropriations. The amount of matching funds for the proposals exceeds \$1 million. Although all of the projects will not ultimately be funded, the projects selected for funding will have over \$400,000 in matching funds from such sources. In addition, the twelve universities involved in the partnership have sizeable amounts of state, industry, and other funds to support these and related research projects.

The work is being conducted by the Nebraska Agricultural Experiment Station at Lincoln. The research projects selected for first year funding should be completed by March 1996. A second year of research funding has been approved and another competition for research funds should be conducted soon. Extensions of first year projects will be allowed to compete with new projects for that funding. The completion date for the second year of the project has not yet been determined.

MIDWEST AGRICULTURAL PRODUCTS, IOWA

Applied research is conducted to improve the global competitiveness and marketability of food and agricultural sector origin products produced in the Midwest and disseminate the results to agribusinessmen. Programs have been initiated on trade and market analysis, agribusiness trade initiatives, and dissemination of research results to agribusiness firms. There is a need by small- and medium-size agribusiness firms in the Midwest region for trade expansion and market research to enable those firms to comprehend the complexities of global markets and to produce and market their products effectively in an increasingly competitive international marketplace.

The goal is to enhance the export of agricultural commodities and value-added products produced by Midwestern agribusiness firms through research and information transfer programs utilizing a close working relationship with those firms.

This program has completed major studies on meat marketing in the former Soviet Union states and Singapore, corn and pork markets in Mexico, soybean product markets in Japan, market opportunities in Indonesia and Eastern European countries, an update on world food trade and U.S. agriculture, and an update on the General Agreement on Tariffs and Trade negotiations. Emphasis is now being

placed on market assessment studies of Latin America, China, Russia, Africa, and the Baltic States. Country and foreign business profile studies are being undertaken to improve the development of trade relationships between firms in those countries and Midwestern firms. Market information is compiled and made available to Midwestern agribusiness firms by electronic media, workshops, and publications. Similar information about Midwestern firms is made available to overseas counterparts.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992-1993 was \$700,000 per year; fiscal year 1994, \$658,000; and fiscal year 1995, \$592,000. A total of \$2,650,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$185,495 State appropriations and \$373,897 industry for a total of \$559,392 in 1992; \$183,192 State appropriations and \$318,966 industry for a total of \$502,158 in 1993; \$127,948 State appropriations and \$500,394 industry for a total of \$628,342 in 1994; and \$258,053 State appropriations and \$389,834 industry for a total of \$647,887 for 1995.

The program is carried out by Iowa State University. This current phase of the program may be completed in 1997.

MIDWEST FEEDS CONSORTIUM

Fiscal year 1994 was the first year of this grant program. The researchers indicate that the consortium will focus on the development of aquacultural feeds aimed at reducing the industries dependence on marine protein meals. The consortium activities have focused on research planning, refining research protocols, and establishing appropriate linkages with industry and other research institutions. At present, many aquacultural feeds contain expensive marine proteins, such as fish meal. The researchers indicate that there is a need to replace imported marine proteins with grain, oilseed, and animal by-product based protein meals common to the U.S. Midwest. Replacement of expensive marine protein meals could reduce the U.S. dependence on foreign imports and could lead to the export of domestically produced plant and animal by-product protein meals.

The goal is to develop aquacultural feeds that use plant and animal by-product protein meals common to the U.S. Midwest to replace expensive marine protein meals. To date the consortium has focused on research planning activities. Research protocols are being developed as well as linkages with appropriate research institutions.

The work supported by this grant began in fiscal year 1994 and the appropriation for fiscal year 1994 was \$470,000 and for fiscal year 1995, \$423,000. A total of \$893,000 has been appropriated.

The university consortium estimates a total of \$214,555 of non-federal funds for this program in fiscal year 1994. The primary source of non-federal funds was from state sources with additional contributions from the private sector.

The work will be carried out through a grant to Iowa State University in cooperation with the Oceanic Institute of Hawaii. Additional consortium members and subcontractors will be added as the program is developed.

Fiscal year 1994 represents the first year of the study and the program is currently in the planning and development stage. The university researchers anticipate that the work will be completed in fiscal year 1998.

MILK SAFETY, PENNSYLVANIA

The overall goal of the Milk Safety Program is to provide insights into factors that help ensure an adequate and safe milk supply. This has included studying various techniques and management practices which affect the safety of the milk during its production, processing, manufacturing and marketing. Special emphasis has been placed on ways to prevent pathogens from entering the milk supply, developing tests to recognize their presence in milk, and developing procedures that destroy the pathogens with a great deal of certainty. A major pathogen, Staphylococcus aureus, is estimated to be responsible for 30 percent of the total food-borne illnesses in the United States. Milk, non-fat dry milk, cheese and other dairy products have been associated with a larger number of the outbreaks of staphylococcal food poisoning. Listeria monocytogenes has also been the cause of food-borne illnesses which have a fatality rate approaching 30 percent. Methods of controlling these pathogens and protecting a basic food group, such as milk, is a primary objective of this research program. A second major objective is to lower the incidence of bovine mastitis caused by staphylococcal infection in dairy cows. According to the National Mastitis Council, sub-clinical mastitis is estimated to cost dairy farmers \$175 per cow annually. Understanding the staphylococcal mechanism and finding preventatives, as they relate to mastitis infection in dairy cows, will enhance the competitiveness of dairy farmers in the United States by lowering their costs and decrease the presence of Staphylococcus aureus in the nation's milk supply.

The research is aimed at minimizing or eliminating future foodborne disease outbreaks from milk and dairy products. During the past year the researchers found that Staphylococcus aureus grown in food with a low moisture content results in cells that are significantly more resistant to destruction by thermal processing; a study is underway on the thermal processing of such foods to ensure their safety. Staphylococcus aureus pathogens, responsible for bovine mastitis, are frequently isolated from bulk-tank milk samples. Immunization protocols that can be used to prevent staphylococcal contamination of milk during pre-harvest production were developed. Dairy cows vaccinated with Staphylococcus aureus antigen in conjunction with interleukin-2 have enhanced staphylococcus antibodies in their milk. An assessment was made of whether recombinant bovine interleukin-2 (rBoIL-2) can be used as an adjuvant to potentiate host defenses against Staphylococcus aureus. Progress has been made on the development of simple, inexpensive methods for the rapid detection of Listeria monocytogenes, an important pathogen in dairy products which has been responsible for several food-poisoning outbreaks and which carries a fatality rate approaching 30 percent.

Grants have been awarded for milk consumption and milk safety from funds appropriated as follows: fiscal years 1986 through 1989, \$285,000 per year; fiscal year 1990, \$281,000; fiscal year 1991, \$283,000; fiscal year 1992, \$284,000; fiscal year 1993, \$184,000; fiscal years 1994 and 1995, \$268,000 per year. A total of \$2,708,000 has been appropriated for milk safety and milk consumption.

The University estimates that non-federal funds contributed to this project include the following costs and salaries: \$265,000 for fiscal year 1991; \$224,700 for fiscal year 1992; and \$142,600 for fiscal year 1993.

The research is being conducted at the Pennsylvania State University. The researchers anticipate that research should be concluded on this project in 1996.

MINOR USE ANIMAL DRUGS

In 1982, Interregional Research Project Number 4 --IR-4-- was expanded to include efforts to obtain FDA clearance of animal drugs intended for use in minor species and for minor uses in major species. In 1993, a separate research project for minor use animal drugs was established. A new project entitled, "NRSP-7 A National Agricultural Program to Approve Animal Drugs for Minor Species and Uses", replaced the IR-4 Minor Use Animal Drug Program. Special research grant funds are divided between the four regional animal

drug coordinators and the headquarters at Michigan State University for support of the drug clearance program. These funds are being utilized by the regional animal drug coordinators and by allocation to State Agricultural Experiment Stations --SAES-- to develop data required for meeting clearance requirements. Participants in the research program consist of the regional coordinators, SAES, ARS, USDI Fish and Wildlife Service, schools of veterinary medicine, and the drug industry. Each year priorities are established for the various species categories including small ruminants, game birds, fur-bearing animals, and aquaculture species. Animal agriculture throughout the U.S. has relied on chemical and pharmaceutical companies to provide their industry with safe, efficacious drugs to combat diseases. The need for FDA/CVM approved drugs to control diseases in minor species and for minor uses in major species has increased with intensified production units and consumer demand for residue-free meat and animal products. The high cost incurred to obtain data required by federal, regional, and local regulations to approve these drugs, when coupled with limited economic returns, has limited the availability of approved drugs for minor uses and minor species. The program provides research needed to develop and ultimately culminate in drug approval by FDA/CVM for the above purposes. The goals are accomplished through the use of regional animal drug coordinators as well as a national coordinator to prioritize the need, secure investigators at federal, state and private institutions, and oversee the research and data compilation necessary to meet federal regulations for approval. All drug approvals are national, although industry use may be regional. For example aquaculture is concentrated in specific geographic sections of the country. The principal researcher believes this research to be of national, regional or local need.

The original goal to obtain FDA clearance of animal drugs intended for use in minor species and for minor uses in major species remains as the dominant goal. In recent years, the research program has expanded or given additional emphasis to aquaculture species, veal calves and sheep. The importance of environmental assessment, residue withdrawals and occupational safety have increasingly been given more attention during the approval process to help assure consumer protection. To date, 248 drug requests have been submitted to the Minor Use Animal Drug Program for clearance. Working in conjunction with many universities, the USDI Fish and Wildlife Service, Agricultural Research Service and numerous pharmaceutical companies, 28 research projects are now active and will be continued through 1994 to establish data for clearances. Twenty public master files, which involve 10 animal species, have been published in the Federal Register providing clearance for drug use in minor species. Nine additional public master files are currently being reviewed.

The Center for Veterinary Medicine of the Food and Drug Administration is cooperating and supporting this program to the fullest extent. The program is a prime example of Federal interagency cooperation in coordination with academic institutions, pharmaceutical industries and commodity interests to effectively meet an urgent need.

Grants have been awarded from appropriated funds in the amount of \$240,000 per year for fiscal years 1982-85; \$229,000 per year for fiscal years 1986-1989; \$226,000 for fiscal year 1990; \$450,000 for fiscal year 1991; \$464,000 per year for fiscal years 1992 and 1993; \$611,000 for fiscal year 1994; and \$550,000 for fiscal year 1995. A total of \$4,641,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$156,099 state appropriations, \$29,409 industry, and \$11,365 miscellaneous in 1991; \$265,523 state appropriations, \$1,182 product sales, \$10,805 industry, and \$59 miscellaneous in 1992; \$212,004 state appropriations, \$315 industry; and \$103 miscellaneous in 1993; and \$157,690 state appropriations, and \$7,103 miscellaneous in 1994.

The grants have been awarded to the four regional animal drug coordinators located at Cornell University, the University of Florida, Michigan State University and the University of California-Davis, and to program Headquarters at Michigan State University. Research is conducted at these universities and through allocation of these funds for specific experiments at the State Agricultural Experiment Stations, the Agricultural Research Service, USDI, and in conjunction with several pharmaceutical companies.

Selected categories of the Special Research Grants program address important national/regional research initiatives. Research projects for this program have involved 20 different animal and aquaculture species with emphasis given in recent years to research on drugs for the expanding aquaculture industry. The minor use animal drugs program involves research on biological systems that by their nature are ever changing and presenting new challenges to agriculture. Especially with the new sensitivities about safety and the environment, there is a high priority for continuation of these ongoing projects.

MOLLUSCAN SHELLFISH, OREGON

The grant proposal has been received and is being reviewed. The researchers propose to establish a repository for the conservation of genetic material of molluscan shellfish. This

repository would serve as a source of genetic material for future breeding programs aimed at commercial production of shellfish with desirable traits. The researchers indicate that there is a national need for a molluscan broodstock development program to benefit the commercial industry through conservation, genetic manipulation and wise management of the genetic resources of molluscan shellfish.

The goals of this research program are to establish a repository for genetic materials of molluscan shellfish, to establish breeding programs for commercial production of molluscan shellfish, and to establish a resource center for the industry, researchers and other interested parties in the U.S. and abroad.

The work supported by this grant begins in fiscal year 1995 and the appropriation for fiscal year 1995 is \$250,000. The university estimates a total of \$135,454 of non-federal funding in fiscal year 1995 primarily from state sources.

Research will be conducted at Oregon State University, Rutgers University, and the University of California at Davis. The researchers anticipate that work may be completed in fiscal year 1999.

MULTI-COMMODITY RESEARCH, OREGON

The purpose of the program is to provide agricultural marketing research and analysis to support producers and agribusinessmen in penetrating new and expanding markets in the Pacific Rim. Oregon and the Pacific Northwest region produce a wide variety of agricultural commodities and products with considerable potential for export to Pacific Rim countries. Research and analysis would assist regional producers and processors in assessing these markets and developing market strategies and value-added products tailored to specific Asian markets.

The goal is to support a research program on the marketing of wheat and other commodities. Objectives are to develop an agricultural growth model to assess Oregon's farm and value-added market potential for products, conduct applied research on Oregon's global competitiveness and policy implications, reassess measures used to estimate the performance of Oregon's agricultural industry, facilitate applied research into value-added agricultural trade, and assess need and implementation of interdisciplinary research with other universities to develop products and international markets. Action plans and projects have been developed to fulfill the objectives and are being implemented.

The research began in fiscal year 1993 with an appropriation of \$300,000. The fiscal year 1994 appropriation was \$282,000, and the fiscal year 1995 appropriation is \$364,000. The total amount appropriated is \$946,000.

The non-federal funding provided for this grant was \$168,824 State appropriations in 1992, \$177,574 State appropriations in 1993, and \$162,394 State appropriations in 1994. The university has not furnished information on the amount of non-federal funds to be appropriated for 1995.

The research program will be carried out at Oregon State University and the Wheat Marketing Center in Portland. No completion date has been provided pending completion of the strategic research plan.

MULTI-CROPPING STRATEGIES FOR AQUACULTURE, HAWAII

In fiscal year 1993, the university redirected this research program to address the opportunities of aquaculture production in the ancient Hawaiian fish ponds. The university has developed a community based research identification process and is currently developing specific research projects to be included in this program. Previous research under this program led to the development of coproduction of shrimp and oysters in aquacultural systems. The technology developed from this program has been commercialized. The researchers indicate that the primary need for this research is to assist the native Hawaiians in improving the profitability and sustainability of the ancient Hawaiian fish ponds as part of a total community development program.

The original goal of this program was to develop technology for the coproduction of shrimp and oysters in aquacultural production systems. Research led to the development of oyster production systems that have been field tested under commercial conditions. The current research effort is aimed at developing sustainable commercial aquaculture production systems on the island of Molokai. A research planning phase of the grant has been completed. Research has been initiated to develop hatchery techniques for two native species of edible aquatic plants. Additionally, research has been initiated on the development of hatchery and rearing technologies for a native finfish species in Hawaii.

This research was initiated in fiscal year 1987 and \$152,000 per year was appropriated in fiscal years 1987 through 1989. The fiscal year 1990-1993 appropriations were \$150,000 per year;

\$141,000 in fiscal year 1994; and \$127,000 in fiscal year 1995. A total of \$1,324,000 has been appropriated.

The university reports a total of \$137,286 of non-federal funding for this program in fiscal years 1991-1994. The primary source of non-federal funding was from state sources.

Research is being conducted at the University of Hawaii. The researchers have indicated that all of the initial research objectives have been completed under the support provided through fiscal year 1992. The university has indicated that the new research program would be completed in fiscal year 1997.

NATIONAL BIOLOGICAL IMPACT ASSESSMENT PROGRAM

The National Biological Impact Assessment Program's mission is to facilitate and assess the safe application of new technologies for the genetic modification of plants, animals, and microorganisms to benefit agriculture and the environment. The National Biological Impact Assessment Program information system for biotechnology provides important and timely access to information for U.S. researchers via an electronic highway. The program's bulletin board is the official source for public information concerning the Animal and Plant Health Inspection Service's field test notification procedure and it carries important Federal policy statements, guidelines, and regulations to the research community nationwide. The Program also provides biosafety training through workshops for academic and corporate scientists, biosafety officers, and state regulators. These workshops are intended to assist individuals and institutions in complying with federal regulations that assure the safety of biotechnology research conducted outside of containment. The principal researcher believes this research to be of national, regional or local need.

The original goal of the National Biological Impact Assessment Program remains to provide easy access to national information on public health and environmental safety of agricultural biotechnology research. Its stated objectives were to increase the availability, timeliness, and utility of information exchange within the biotechnology research community; facilitate the preparation of proposals by scientists to comply with the oversight and regulatory requirements for testing potential biotechnology products; and support for the national research community with services and resources that would foster the safe application of biotechnology to agriculture and the environment. The program has expanded access to the electronic bulletin board system which services 8,000 system users seeking information on the

safe applications of biotechnology to agriculture and the environment. The program also continuously improves its databases for more rapid access and reduced information transmission costs. The National Biological Impact Assessment Program periodically updates its permit application software which facilitates the design for safe experiments and the drafting of applications for federal permit to conduct field tests with genetically modified organisms. The National Biological Impact Assessment Program has supported research in risk assessment and has completed development of a biological monitoring database of Environmental Assessments derived from the U.S. Department of Agriculture field test permit approvals. This data base has been distributed nationally on a Compact Disk Read only Memory --CD-ROM--.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$125,000; fiscal year 1990, \$123,000; fiscal years 1991-1993, \$300,000 per year; fiscal year 1994, \$282,000; and fiscal year 1995, \$254,000. A total of \$1,684,000 has been appropriated.

The co-principal investigator of this grant is Head of the Department of Biochemistry and Anaerobic Microbiology at Virginia Tech. and approximately \$5,000 of his salary is provided by the University to administer this grant.

The Program coordination is being provided by the Virginia Polytechnic Institute and State University. Former and current partners in the program include The Pennsylvania State University, Louisiana State University, North Carolina Biotechnology Center, University of Arizona, University of Missouri, Michigan State University, Purdue University, and the National Agricultural Library. There remains a continuing need to address the safety of field testing of genetically modified organisms with respect to agriculture and the environment. This program has been very successful in providing essential information on the conduct of safe field experiments, and thus the program remains a high priority and will need to be extended beyond the initially planned five years.

NAVAJO NATION CONSERVATION

We are awaiting the proposal which will describe the nature of the research to be funded. The expected goal of the research is to work on rural and community development in Navajo country through agricultural technologies research.

The work supported by this grant will begin in fiscal year 1995 and the appropriation for fiscal year 1995 is \$91,000.

We have not had a report from the University of Arizona on anticipated non-federal funding for this project.

Research will be conducted at the University of Arizona and on the Navajo Nation reservation. We expect this information to be provided in the grant proposal, which has not yet been received.

NEMATODE RESISTANCE GENETIC ENGINEERING, NEW MEXICO

This research project is exploring alternatives to pesticides. The intent of the project is to decrease or eliminate the current reliance on soil-applied pesticides which are now or are likely to become significant contaminants of ground water. The research involves creating resistance to nematodes within the plants themselves by utilizing qualities from various predacious fungi and mammalian sources, and to transfer the genetic information required for predation to crops. The Nematode Resistance Genetic Engineering Project is designed to provide an environmentally sound, specifically targeted, and biotechnologically advanced way of combating nematode infestations of agronomically valuable crop plants with the potential for both regional and national application. Nematodes cause \$77 billion in worldwide crop losses annually, and they attack quickly all vegetable and field crops. Although nematodes occur worldwide, the greatest damage in agriculture is associated with areas with mild winters such as the southwest U.S. where the soils do not freeze. Current nematode control practices consist mainly of crop chemical nematicides which are considered undesirable because of associated ground water contamination problems. Genetically engineered crops with nematode resistance offers great promise.

The original goal of this project remains to provide an alternative approach for the control of plant parasitic nematodes through the use of molecular biological techniques for the transfer of nematocidal resistance capacities directly to plants. The project has successfully inserted the collagenase gene into plants and bioassays have demonstrated activity of the resistance against plant parasitic nematodes. The feasibility of this innovative, genetic engineering approach is now being tested.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal years 1991-1993 was \$150,000 per year; \$141,000 in fiscal year 1994; and \$127,000 in fiscal year 1995. A total of \$718,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$65,000 state appropriations in 1991; \$65,000 state appropriations in 1992; \$75,000 in state appropriations in

1993; \$75,000 in state appropriations in 1994; and \$75,000 in state appropriations estimated for 1995.

Research is being conducted at the New Mexico State University, and at collaborating universities in the region. The Program has indicated that the objectives will be completed by fiscal year 1996.

NEW METHODS OF WEED CONTROL, NORTH DAKOTA

The project is designed to reduce the environmental pollution caused by the extensive usage of herbicides for weed control and provide growers with environmentally safe weed control systems. The present project addresses three areas; one being crop production practices, second, weed biology and herbicide resistance, and third, efficient herbicide usage. In crop production practices, systems experiments have been established at three locations that include crop rotation, tillage, seeding method and time, sustainable practices, and effect of weed control intensity on long-term weed infestations and economic returns. In weed biology and herbicide resistance, kochia and Russian thistle seed are being studied. In efficient herbicide usage, a number of factors are being studied such as methods of application to maximize target reception and weed-detecting sprayers to treat only areas where weeds are present. The research addresses new methods to control weeds using systems control with multi-year, multi-crop rotations, reduced pesticide applications, and techniques to enhance herbicide efficiency.

The original goal was to develop new, efficient weed control methods. To accomplish this, long-term field experiments have been initiated to obtain basic crop-weed biology and production system information. The first two years of the rotation experiments have been completed in 1993 and 1994. The unusual environment conditions in 1993 indicated the need to complete two cycles of the rotation for a total of eight years in order to obtain reliable scientific information. The efficient weed control research has developed methods to overcome salts in spray water antagonistic to some herbicides; is developing information on adjuvants to reduce herbicide rates or improve their performance consistency; and is obtaining information on weed competition with crops and on weed resistance to herbicides in order to possibly develop methods to prevent herbicide resistance.

The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was \$500,000 per year; \$470,000 in fiscal year 1994; and \$423,000 in fiscal year 1995. A total of \$1,893,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: no matching in 1991; \$27,030 state appropriations in 1992, \$48,472 state appropriations in 1993, and \$41,969 state appropriations in 1994.

Research is being conducted at North Dakota State University. The principal investigator anticipates that the work will be completed in the year 2001.

NONFOOD AGRICULTURAL PRODUCTS PROGRAM, NEBRASKA

This work focuses on the identification of specific market niches that can be filled by products produced from agricultural materials, developing the needed technology to produce the product, and working with the private sector to transfer the technology into commercial practice. Major areas of application include starch-based polymers, use of tallow as diesel fuel, improvements in ethanol production, use of vegetable oil as drip oil for irrigation wells, production of levulinic acid --antifreeze, plasticizers--, and cyclodextrins --personal care, pharmaceuticals--, from corn starch and production of cyclic peptides. Our ability to produce agricultural commodities exceeds our needs for food and feed. These commodities are environmentally friendly feedstocks which can be used in the production of many biochemicals and biomaterials that have traditionally been produced from petroleum. The production of the commodities and the value-added processing of these commodities is regional in scope.

The objectives of the Center are to identify niche markets for industrial utilization of agricultural products, improve and develop conversion processes as needed for specific product isolation and utilization, provide technical, marketing and business assistance to industries, and coordinate agricultural industrial materials research at the University of Nebraska, Lincoln. This project has had specific annual goals pertaining to development of starch-based plastic foams, protein films, corn-whey fermentations, acetone-butanol ethanol fermentations/separations, and beef tallow and soybean oil biodiesel fuels. Although most of these projects have not been completed, several significant accomplishments can be identified: a patent is pending on a starch-based plastic foam, a patent application is being prepared on a continuous corn-whey fermentation process, a continuous starch liquefaction process has been developed for use in fermentation processes, significant grant support has been obtained as a result of start up funding through this project, and significant progress has been made on protein films, emissions testing of biodiesel

fuels, use of soybean oil as a drip oil for irrigation pumps, and membranes for improved fermentation separations.

The funding levels for this project are \$109,000 in 1990; \$110,000 per year in fiscal years 1991-1993; \$103,000 in fiscal year 1994; and \$93,000 in fiscal year 1995. A total of \$635,000 has been appropriated.

The non-Federal funding for this project are in fiscal year 1992, \$315,000, fiscal year 1993, \$330,000, fiscal year 1994, \$330,000, and fiscal year 1995, \$309,000.

These funds were from Nebraska Corn, Soybean, Wheat, Sorghum and Beef Boards, World Wildlife Fund, Nebraska Bankers Association, United Soybean Board and National Corn Growers Association.

This work is being conducted at the Industrial Agricultural Products Center, L.W. Chase Hall, University of Nebraska, East Campus, Lincoln, Nebraska. Another two years will complete the projects currently given major emphasis.

NORTH CENTRAL BIOTECHNICAL INITIATIVE

The North Central Biotechnical Initiative has proposed to establish a competitive grant program for biotechnology research projects submitted as proposals by member institutions. Projects will be solicited in plant biotechnology. Proposals will be subjected to peer review for science quality and industrial reliance, expressed through industrial endorsements and research partnerships. The proposal states the need for this research to better link public and private research activities in Plant Biotechnology for enhanced commercialization possibilities of this area of agriculture research.

The original goal of this research is to promote the application of biotechnology, discoveries to commercial applications through industry partnerships.

The work supported by this grant begins in fiscal year 1995 and the fiscal year 1995 appropriation is \$2,000,000. At this time Purdue University has not allocated any non-federal funds for this grant.

Research will be conducted at eligible research universities in the North Central region. The researchers anticipate that work may be completed in fiscal year 1999.

OIL RESOURCES FROM DESERT PLANTS, NEW MEXICO

The Plant Genetic Engineering Laboratory --PGEL-- has been exploring the potential for the production of high value industrial oils from agricultural products. The effort has been focused on transferring the unique oil producing capability of jojoba into oilseed rape and soybean. With the development in the PGEL lab of technology to both isolate the enzyme components of oil biosynthesis and successfully transform the target plants, significant advances have been made with jojoba. This year PGEL continues to look at other plant sources of other unique industrial oils, with successful enzyme isolations from meadowfoam and castor. Desert plant sources of valuable oils for industrial applications are typically low yielding and limited in climatic areas for farm production. Genetic engineering offers an opportunity to move genetic capability to high yielding, major crops. Many of the oils and their derivative acids, waxes etc. can directly substitute for imports of similar polymer materials, especially petroleum.

Progress in the last year includes: insertion of the reductase gene into a model plant and rapeseed, isolation of the transacylase enzyme in jojoba liquid wax, continued characterization of the reductase gene, and screening a broader range of enzymes involved with lipid biosynthesis resulting in the identification of two new enzymes of importance, a hydroxylase from castor and a LPA acyl transferase from meadowfoam. These are significant milestones toward accomplishing successful transfer of genetic capability.

This work began in fiscal year 1989 with a \$100,000 grant under the Supplemental and Alternative Crops program. Grants have been awarded under the Special Research Grants program as follows: fiscal year 1990, \$148,000; fiscal years 1991-1993, \$200,000 per year; fiscal year 1994, \$188,000; and in fiscal year 1995, \$169,000. A total of \$1,205,000 has been appropriated.

Non-federal funds are not provided for this research. New Mexico State University and the Plant Genetic Engineering Laboratory provide unspecified in-kind support including faculty salaries, graduate student stipends, facilities, equipment maintenance and administrative support services.

The research is being conducted by the Plant Genetics Engineering Laboratory at New Mexico State University, Las Cruces, New Mexico. The PGEL proposal for 1995 funds estimates that an additional 1-2 years would be required to complete the project.

OREGON/MASSACHUSETTS/PENNSYLVANIA BIOTECHNOLOGY PARTNERSHIP

The intention of the original Oregon/Massachusetts Biotechnology Partnership was to facilitate the commercial development of biotechnology products. The two state Partnership began with funding in fiscal year 1990 and has continued its research but with an interruption in funding in fiscal year 1993. Oregon State University is expected to propose research and technology transfer technology activities in plant biotechnology derived from a consortium of universities and public institutions. It is estimated that by the year 2000 the world wide market for processed agricultural and food products derived from biotechnology will exceed \$100 billion annually. The Oregon /Massachusetts/ Pennsylvania partnership is a model to study how research may be productively developed and commercialized through partnerships. Research currently underway involves both basic understanding of genetic engineering and the application of biotechnology procedures to develop new products.

The original goal of the Partnership remains to accelerate the development of biological, agricultural and forestry research discoveries and move that knowledge into the marketplace through the creation of new commercial ventures. To accomplish this, Oregon and Pennsylvania are providing the research infrastructure while the Massachusetts partner is developing the commercial pathway for the products that emerge from the biotechnology research.

Research projects currently funded through the partnership include: a study of how fungi degrade chemical pollutants; a study of tissue differentiation in plants under genetic control; and the expression of genes in different types of cells. The partnership is also funding pear cultivar improvement using biotechnology and is looking for ways to protect potatoes from virus infection. It is also investigating the use of DNA fingerprinting for the identification of grape rootstocks.

Progress in the commercialization of research discoveries of the Partnership have been slow. Several promised and budgeted activities intended to bring the Partnership together, such as conferences and joint planning meetings, have not occurred, or were done only to a limited extent. Oregon's interrupted participation in the Partnership in fiscal year 1993 also removed the research base from the Partnership. This precipitated significant questions regarding the program's performance. As a result, the USDA's Office of the Inspector General is currently conducting an audit of expenditures and a review of program activities of the Partnership.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, \$247,000; fiscal year 1991, \$500,000; fiscal year 1992, \$537,000; fiscal year 1994, \$481,000; and fiscal year 1995, \$524,000. A total of \$2,289,000 has been appropriated. The appropriation for fiscal year 1993 was \$256,000 and was only for Massachusetts.

The non-federal funds and sources provided for this grant were as follows: \$269,918 state appropriations, \$37,584 product sales, \$27,334 from industry and \$6,833 miscellaneous in 1991; \$289,501 state appropriations, \$40,310 product sales, \$29,317 from industry and \$7,329 miscellaneous in 1992; --there was no Oregon/Massachusetts Biotechnology Partnership appropriation in 1993--; and \$297,925 state appropriations, \$41,483 anticipated product sales, \$30,120 from industry and a projected \$7,542 miscellaneous in 1994. We do not yet have a report for 1995.

Research is expected to continue at Oregon State University, the University of Oregon, The Oregon Graduate Institute, research institutions in Pennsylvania and the Massachusetts Biotechnology Research Institute. The university researchers anticipate that work may be completed in fiscal year 1998.

PEACH TREE SHORT LIFE

Progress continued in 1994 with focus on improvement of peach rootstocks for use in soils where the ring nematode, *Crictonemella xenoplax*, is present and contributing to peach tree short life. Field trials of selected rootstocks are continuing. Work has continued on crops such as wheat in the rotation to suppress the pathogen. Additional studies of the physiological effects on peach trees resulting from ring nematode parasitism continued in 1994. This problem affects more than 20 percent of the peach acreage in the Southeastern U.S., and amounts to a local and regional need.

The original goal was to control peach tree shortlife in South Carolina; however, new cooperative work with other southern states increased the potential payoffs for the entire peach industry in the south. New peach breeding lines selected as potential rootstock material were budded to a commercial scion, and have shown superior performance in initial tests. Studies on plum as a rootstock have encountered an incompatibility problem, but an interstem approach is being used as a way to avoid this problem. A new breeding line, BY520-9, has out-survived all genotypes, and trees from this line are being evaluated. A seed orchard or selections from BY520-9 has been established, and all individuals will be evaluated for potential as sources of open-pollinated seedlings and as material for genetic fingerprinting.

Grants have been awarded from funds appropriated as follows: fiscal year 1981, \$100,000; fiscal years 1982-1985, \$192,000 per year; fiscal years 1986-1988, \$183,000 per year; fiscal year 1989, \$192,000; fiscal year 1990, \$190,000; fiscal years 1991-93, \$192,000 per year; fiscal year 1994, \$180,000; and fiscal year 1995, \$162,000. A total of \$2,717,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$149,281 state appropriations in 1991; \$153,276 state appropriations in 1992; \$149,918 state appropriations in 1993; and \$211,090 state appropriations in 1994.

The research is being conducted at the South Carolina Agricultural Experiment Station. The university researchers anticipate that some phases of the work will be completed in fiscal year 1996.

PERISHABLE COMMODITIES

The overall objective of this research is to investigate Federal and private sector grade standards governing the cosmetic appearance of perishable commodities and determine how they affect pesticide use. The research is designed to determine pesticide application amounts on perishable commodities, the extent to which Federal grade standards affect pesticide use, the effect of reducing emphasis on cosmetic appearance in grade standards upon use of pesticides and adoption of agricultural practices that will result in reduced pesticide use and the extent to which grade standards reflect consumer preferences. The research addresses the need for a comprehensible evaluation of the grading standards for perishable commodities and pesticide use impacts mandated in the 1990 Farm Bill.

The name "Perishable Commodities - Georgia" reflects the subject area and location from which the study is being conducted. A thorough review of the Federal grade standards is complete for the nine targeted commodities which include apples, bell peppers, oranges, sweet corn, tomatoes, peaches, cabbage, cucumbers, and squash. Several inconsistencies in the federal grade standards have been identified.

The researchers also note that most agricultural product grading systems have been developed over decades and have been confined to the ability to rapidly measure a trait. These grading systems are used to establish the price that farmers, wholesalers, brokers, produce buyers and food companies trade on. However, most marketing standards have no direct measure of the traits consumers want when purchasing a product. These traits include flavor,

nutrition, shelf-life and production practices. Instead, most raw agricultural produce standards are based on categories related to size, shape, color and surface blemishes. Therefore, current standards may diminish our long-term competitiveness.

The work supported by this grant began in fiscal year 1993. The appropriation for fiscal year 1993 was \$250,000; for fiscal year 1994, \$235,000, and for fiscal year 1995, \$212,000. A total of \$697,000 has been appropriated.

Non-federal funds have not been provided for this grant. However, several industries have cooperated by contributing internal resources to specific areas within the research project.

The research is being conducted at the National Environmentally Sound Production Agriculture Laboratory, which is located on the University of Georgia Coastal Plain Experiment Station campus. The university researchers anticipate that work may be completed in fiscal year 1996.

PEST CONTROL ALTERNATIVES, SOUTH CAROLINA

This grant supports research that is focused on the development of non-pesticidal controls of vegetable pests. These alternatives may complement or replace conventional chemical applications in the production system. Scientists have devoted considerable resources to the discovery and improvement of microbial-based products. These scientists also are determining the effectiveness of these new products in commercial production systems, they are integrating cultural practices into the control strategies where they can enhance the natural or biological controls. The local need for this research is to provide new and better management tactics and strategies for control of pests of vegetables. Vegetables are an important crop for South Carolina for which many conventional chemical controls have failed. The failure of controls in vegetables has occurred or will occur in other parts of the nation. New concepts and materials developed in South Carolina will be useful in research programs in other states and regions.

Work has progressed in finding microbial diseases of wireworms. A granulosis virus is being tested for control of the imported cabbage worm. Methods of protecting the microbial products from degradation by sunlight are being tested. New microbial agents for control of North Carolina pests of vegetables have been found in Indonesia and are being tested in quarantine for importation and use. Educational workshops and field days are

being conducted to guide farmers in the use and evaluation of these new kinds of products.

The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was \$125,000 per year. In fiscal year 1994 the appropriation was \$118,000, and in fiscal year 1995, \$106,000. A total of \$479,000 has been appropriated. South Carolina has provided \$124,860 per year from State appropriations.

This research is being conducted at the South Carolina Agricultural Experiment Station, Clemson University. The researchers anticipate that work may be completed by March 1996.

PESTICIDE CLEARANCE

The pesticide clearance program --IR-4-- includes the State Agricultural Experiment Stations and United States Department of Agriculture, Agricultural Research Service --ARS--. IR-4 provides the national leadership, coordination and focal point for obtaining tolerance and safety data for pesticides and biological control agents for specialty crops such as horticultural crops. The agricultural chemical industries have not economically justified the time and expense to conduct the necessary research for pesticides with small market potential. With the Federal registration resulting from this research, a large number of small acreage crops such as vegetables, fruits, nuts, spices and other specialized crops have been provided with needed crop protection against pests. Protocols are written after careful review and inputs from representatives of grower groups, industry and researchers. The researchers then carry out field trials on priority needs to determine their effectiveness, safety and usefulness and then analyze the field grown commodities, where appropriate, to identify and quantify any residues that may persist. All of this is done according to Good Laboratory Practices guidelines. The research program then assimilates the data from all the participating experiment stations, grower groups and chemical industry, and petitions are written for tolerances and Federal registration or reregistration. The goal is to conduct research to register or reregister pesticides or biological control agents for pest problems on minor crops. This is a national research effort which identifies needs by a network of users and state university and Federal researchers. The principal researcher believes this research to be of national, regional or local need.

One goal is to obtain minor use and specialty use pesticide clearances and assist in the maintenance of current registrations. And another is to further the development and registrations of

microbial and specific biochemical materials for use in pest management systems. Since its beginning, the IR-4 Project has been responsible for data to support 1,590 clearances on food crops. In addition, 10 biological pest control agents have received clearance. For ornamental crops, a total of 3,225 labels for use of pesticides have been issued.

Grants have been awarded from appropriated funds as follows: Program redirection in fiscal year 1975, \$250,000; fiscal year 1979, \$500,000; fiscal years 1977-1980, \$1,000,000 per year; fiscal year 1981, \$1,250,000; fiscal years 1982-1985, \$1,400,000 per year; fiscal years 1986-1989, \$1,369,000 per year; fiscal year 1990, \$1,975,000; fiscal year 1991, \$3,000,000; fiscal years 1992-1993, \$3,500,000 per year; fiscal year 1994, \$6,345,000; and fiscal year 1995, \$5,711,000. A total of \$41,107,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$891,856 state appropriations and \$65,402 industry in 1991; \$1,002,834 state appropriations and \$104,292 industry in 1992; \$1,086,876 state appropriations and \$310,133 industry in 1993; \$550,160 state appropriations, \$408,600 industry, and 924,169 miscellaneous in 1994.

Field work is performed at the State and Territorial Experiment Stations. Laboratory analysis is conducted primarily at the California, New York, Florida and Michigan Agricultural Experiment Stations with assistance by the Oregon, Hawaii, North Dakota, Arkansas, North Carolina, Washington, Virginia, Mississippi, Idaho, Pennsylvania and New Jersey Agricultural Experiment Stations. Protocol development, data assimilation, writing petitions, and registration processing are coordinated through the New Jersey Agricultural Experiment Station. ARS is conducting minor use pesticide studies at locations in California, Georgia, Illinois, Maryland, Ohio, Oregon, South Carolina, Texas, and Washington. ARS laboratories in Georgia, Maryland and Washington are cooperating with analyses.

Selected categories of the Special Research Grants program address important national and regional research initiatives. The pesticide clearance program involves research on biological systems that by their nature are ever changing and presenting new challenges to agriculture. The IR-4 workload is anticipated to be long term because of the new sensitivities about food safety and the environmental, plus the reregistration of older pesticides mandated by the 1988 amendments to the Federal Insecticide, Fungicide, and Rodenticide Act --FIFRA--. IR-4 developed a strategy in 1989 to defend needed minor use pesticides that were subject to reregistration but would not be supported by industry

for economic reasons. IR-4 will fulfill these commitments by December 1997, the conclusion of reregistration. IR-4's present strategy focus on resources on the registration of biopesticide and safer pest control technology for minor crops. This program thrust will be carried out along with the traditional minor crop pesticide clearance program.

PESTICIDE IMPACT ASSESSMENT

Research funded is targeted to fill pesticide informational needs and for pesticide assessment reports for the National Agricultural Pesticide Assessment Program of the USDA and used by the Environmental Protection Agency --EPA--. Research has focused on pesticide benefits and use surveys, environmental fate of pesticides, pesticide residues, and exposure and risk assessments. This project is a national effort involving all state Agricultural Experiment Stations and State Cooperative Extension Services and coordinated by USDA. The program serves to provide USDA with risk/benefit assessment reports and contributes to the EPA pesticide regulatory decision-making process. The principal researcher believes this research to be of national, regional or local need.

The original and current goal is to provide comprehensive assessments on pesticides by collecting and coordinating research and information from our state cooperators for the EPA decision-making process on pesticide regulations. Data and objective interpretations of pesticide benefits and risks are required to meet these regulatory decisions. Research efforts to date have contributed important information on environmental effects, human exposure risks, economic impacts and crop quality and yield data. Information has been generated which is useful in minimizing potential human risks; this includes application technology, pesticide detection methodology, and determination of factors governing environmental fate. A significant accomplishment is the development of an economic impact model being developed and tested which will be made available for expanded use.

Grants have been awarded from funds appropriated as follows: Fiscal years 1977-1981, \$1,810,000 per year; fiscal years 1982-1985, \$2,069,000 per year; fiscal years 1986-1988, \$1,968,000 per year; fiscal year 1989, \$2,218,000; fiscal year 1990, \$2,437,000; fiscal years 1991, 1992 and 1993, \$2,968,000 per year; fiscal year 1994, \$1,474,000; and fiscal year 1995, \$1,327,000. A total of \$39,590,000 has been appropriated.

A major source of non-federal funds comes through the State Agricultural Experiment Stations. Time spent on Pesticide Impact

Assessment activities by each state Liaison Representative and other faculty is paid by each State, and the total is estimated at \$2,562,000 per year.

This work is underway at State Agricultural Experiment Stations in 53 states and Territories. Competitively awarded research funds which fill both national and regional informational needs are coordinated through a lead State in each of the four regions of the United States which are the West, California; North Central, Ohio; Northeast, Pennsylvania; and the South, Georgia. Activities related to reregistration as mandated by the Federal Insecticide, Fungicide, and Rodenticide Act --FIFRA-- amendments of 1988 are projected to be completed by the end of calendar year 1997. However, the pesticide impact assessment program involves research on biological systems that by their nature are ever changing and presenting new challenges to agriculture. There is a high priority for continuation of these ongoing projects into the twenty-first century, particularly in view of increased public concerns about food safety and the environment.

PESTICIDE RESEARCH, WASHINGTON

This special grant for Washington State University is also shared by Washington with Idaho and Oregon to establish a cooperative pesticide analytical and information program for food quality/pesticide research with Washington State University as the lead organization. The purpose of the research is to ensure the availability of safe pesticides required by producers of crops and animal products in the tri-state region. This includes determining the range of pesticide residue studies needed by producers and processors, with emphasis on regional specialty crops; identifying crops and animal products with anticipated critical residue investigations needed in the next decade; projecting the types of studies needed to control environmental contamination by pesticides; identify development needs, such as general laboratory availability, and operational costs; and identifying appropriate support staff requirements. Washington has established a Food and Environment Quality Laboratory to investigate the fate of pesticides on crops and in the environment and to support minor crop registrations through the IR-4 program. The goal of the Pesticide Research, Washington Project is to strengthen pesticide analytical and informational capabilities of the three northwest states--Washington, Oregon, and Idaho. This goal is being pursued by collaborative planning and execution among the pesticide analytical laboratories of the three land-grant universities and cooperation with pesticide analytical laboratories of the three State Departments of Agriculture and other regional pesticide laboratories.

The original goal was a feasibility study of the needs of the region that might be served by a regional analytical pesticide research laboratory. During the last four years, the project has focused on laboratory development. Facilities at Washington State University --Tri-Cities campus-- were remodeled to create the Food and Environmental Quality Laboratory. Existing pesticide analytical programs at Oregon State University and the Washington State University were initiated. A cooperative pesticide analytical and information programs in the Tri-State region was with Washington taking the lead.

Grants have been awarded from appropriated funds as follows: fiscal year 1990, \$49,000; fiscal year 1991, \$484,000; fiscal years 1992 and 1993, \$667,000 per year; fiscal year 1994, \$627,000; and fiscal year 1995, \$115,000. A total of \$2,609,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: no matching in 1991 or in 1992; \$524,400 state appropriations, \$458 product sales, and \$28,517 miscellaneous in 1993; \$545,376 state appropriation, \$476 product sales, and \$29,658 miscellaneous in 1994.

Research is being conducted at Washington State University in cooperation with the University of Idaho and Oregon State University. The university researchers anticipate that work through fiscal year 1996 should result in significant achievements towards the objectives of this project.

PHYTOPHTHORA ROOT ROT, NEW MEXICO

Efforts have continued on the development of chile cultivars with resistance or tolerance to the Phytophthora fungus. Other work has involved development of cultural practices that will foster maintenance of the new cultivars once introduced to field production conditions. The phytophthora disease continues to spread in the west Texas, New Mexico, and Eastern Arizona chile pepper production region. Therefore, this research has regional as well as local significance.

The principal goal is to improve chile production through genetically superior cultivars, combined with their maintenance. An excellent source of Phytophthora resistance has been identified in a wild Capsicum from Mexico. A new, improved seedling screen was developed for rapid identification of resistant individuals. Studies on the effect of soil matric potential on growth of the fungus pathogen showed that potentials from 0 to -80 kPa --water tension unit-- are conducive to vegetative growth, but rate of

growth decreases as the soil dries. This work concludes that control of the root rot by irrigation management is not likely to depend on reduction of soil fungus vegetative growth as a control strategy. Studies on the efficacy of different cultivation techniques to control root rot were continued. It is anticipated that novel control techniques, of national significance, may be a long-term outcome of this research.

The work supported by this grant began in fiscal year 1991 with an appropriation of \$125,000 for fiscal year 1991. The fiscal years 1992-1993 appropriation was \$150,000 per year; \$141,000 in fiscal year 1994; and \$127,000 in fiscal year 1995. A total of \$693,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$363,965 state appropriations in 1991; \$363,965 state appropriations in 1992; \$363,965 state appropriations in 1993; and \$363,965 state appropriations in 1994.

Research is being conducted at New Mexico State University. The university researchers anticipate that work may be completed in fiscal year 1995.

POTATO RESEARCH

Scientists at several of the State Agricultural Experiment Stations in the Northeast, Northwest, and North Central States, are breeding russet type, high yielding, disease and insect resistant potato cultivars, adapted to the growing conditions in their particular areas, both for the fresh market and processing. Research is being conducted in such areas as protoplast regeneration, somoclonal variation, storage, propagation, germplasm preservation, and cultural practices. This research effort addresses needs of the potato producers and processor. Research areas being studied include storage and post-harvest handling of potatoes and their effect on potato quality. Regional needs are breeding and genetics, culture factors and pest control on potato production.

The original goal was to improve potato production through genetics and cultural practices as well as improve storage for quality potatoes for processing and fresh market. This research has resulted in a number of new high yielding, good quality, disease and insect resistant, russet type cultivars, which are now being used in the processing industry and in the fresh market. Research at Washington State University has resulted in the release of three cultivars: Ranger Russet, Frontier Russet and Chipeta.

Grants have been awarded from funds appropriated as follows: fiscal year 1983, \$200,000; fiscal year 1984, \$400,000; fiscal year 1985, \$600,000; fiscal years 1986-1987, \$761,000 per year; fiscal year 1988, \$997,000; fiscal year 1989, \$1,177,000; fiscal year 1990, \$1,310,000; fiscal year 1991, \$1,371,000; fiscal years 1992 and 1993, \$1,435,000 per year; fiscal year 1994, \$1,349,000; and fiscal year 1995, \$1,214,000. A total of \$13,010,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$401,424 state appropriations, \$4,897 product sales, \$249,830 industry, and \$30,092 miscellaneous in 1991; \$567,626 state appropriations, \$6,182 product sales, \$334,478 industry, and \$44,323 miscellaneous in 1992; \$556,291 state appropriations, \$9,341 product sales, \$409,541 industry and \$44,859 miscellaneous in 1993, \$696,079 state appropriations, \$21,467 product sales, \$321,214 industry, and \$226,363 miscellaneous.

The research work is being carried out at the Cornell, Idaho, Maine, Maryland, Michigan, North Dakota, Oregon, Pennsylvania, and Washington State Agricultural Experiment Stations. The university researchers anticipate that their work may be completed in fiscal year 1995.

PRESERVATION AND PROCESSING RESEARCH, OKLAHOMA

Fruit and vegetable cultivars have been evaluated for harvest and storage and shipping potential, critical biological processes limiting shelf life and potential for mechanical harvest of fresh horticultural commodities have been investigated, optimum storage and shipping conditions for commodities have been identified, and a device was developed to nondestructively measure maturity for selected fruits and vegetables. This device is under commercial development, to be marketed within three years. New processing technologies are being developed for commercial adaptation to improve the oxidative stability and reduce the calorie content of tree nuts. Specialized harvesting, handling and storage systems for processing horticultural crops are under development, to support growth of the food processing industry. The research and development activities for preservation and processing research in Oklahoma support development of instrumentation and procedures to efficiently handle and process horticultural commodities, with special emphasis on those commodities best suited for profitable production in that region. Nationally, technological improvements in fruit, nut and vegetable handling systems are critically needed to supply domestic markets, and to support continued participation in international commerce. Locally, improvements in postharvest handling and processing are necessary to support growth of the

industry and ensure competitive involvement within national and international commerce of horticultural commodities uniquely suited for production in Oklahoma.

The goal of the research was to define the major limitations for maintaining quality of harvested fruits and vegetables and prescribe appropriate harvesting, handling and processing protocols to extend shelf life of harvested horticultural commodities, thus maintaining profitability of production systems and assuring an economic market niche for Oklahoma producers. A systems approach to develop complementary cropping, harvesting, handling and processing operations has resulted in development of improved handling systems for cucurbit and tree fruit crops. Research and development activities to support commercial adaptation of instrumentation for nondestructive on-line determination of fresh fruit and vegetable maturity have been supported and industry prototypes should be available by 1997. An Oklahoma-based manufacturer is cooperating on this project, and matching funding to support technology transfer for commercialization of the instrument has been obtained from a state agency. Matching funding also supports development of new processing systems for partial oil reduction of tree nuts, to extend shelf life and lower the calorie content for the raw or processed product. Technologies and procedures previously developed for cucurbit and tree fruit systems are now being applied to support development of profitable okra, spice crop --pepper, sage and basil--, tree nut and sweetcorn cropping, handling and light processing systems, with a targeted completion date of 1999.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, \$100,000; fiscal year 1986, \$142,000; fiscal year 1987, \$242,000; fiscal years 1988 and 1989, \$267,000 per year; fiscal year 1990, \$264,000; fiscal year 1991, \$265,000; fiscal year 1992, \$282,000; fiscal year 1993, \$267,000; fiscal year 1994, \$251,000; and fiscal year 1995, \$226,000. A total of \$2,573,000 has been appropriated.

Support from the State of Oklahoma, through the Oklahoma Agricultural Experiment Station and through the Oklahoma Centers for Advancement of Science and Technology, have been provided as follows: fiscal year 1991, \$126,900; fiscal year 1992, \$209,783; fiscal year 1993, \$219,243; and fiscal year 1994, \$308,421. A total of \$1,501,386 from non-federal funds has been provided over the duration of this project. An additional \$14,500,000 has been committed by the State of Oklahoma for development of an Agricultural Products and Food Processing Center to support the horticulture processing initiatives.

This work is being conducted at the Oklahoma State Agricultural Experiment Station, in conjunction with ongoing production research at the Wes Watkins Agricultural Research and Extension Center and the South Central Agricultural Research Laboratories. The project investigators anticipate that the fiscal year 1995 grant will support work through June 1997.

PROCERUM ROOT DISEASE

Research has continued to involve study of the epidemiology of the disease. University scientists have studied vector behavior to determine when they are likely to transmit the fungal pathogen. Various chemical insecticides were tested to determine if they are effective in controlling this disease. The disease has spread throughout Southwest Virginia, causing losses of over 800,000 eastern white pine trees. The pathogen is found in plantations and natural stands of pines throughout Virginia and the southeastern United States. Therefore, this disease has local and regional significance.

The original goal of this research was to gain information that will foster the establishment of a comprehensive management program for procerum root disease in Christmas tree plantations. Work conducted last year on the pales weevil carrier of the root rot fungus shows that the pathogen is transmitted only infrequently internally, and corollary studies verified the importance of external body parts of the insect as sites for vectoring the fungus. Insect trapping studies showed that the vast majority of weevils carry the pathogen in the months of May through October. Weevil feeding studies to determine the efficacy of currently recommended insecticides showed no mortality, so this study was terminated.

The work supported by this grant began in fiscal year 1992, and the appropriation for fiscal years 1992-1993 was \$25,000 per year; \$24,000 was appropriated in fiscal year 1994; and \$22,000 was in fiscal year 1995. A total of \$96,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$1,721 state appropriations, \$260 industry, and \$104 miscellaneous in 1992; \$4,794 state appropriations, \$162 industry and \$149 miscellaneous in 1993; and \$4,919 state appropriations, \$150 industry, and \$101 miscellaneous in 1994.

Research is being conducted at Virginia Polytechnic Institute and State University. The university researchers anticipate that work may be completed in fiscal year 1995.

PRODUCT DEVELOPMENT AND MARKETING CENTER, MAINE

The purpose of this grant is to conduct a program of research to develop new and innovative marketable food and forest products, increase both domestic and international market opportunities for Northern New England food and forest products, and enhance the marketing skills of producers and consumers to take advantage of new market opportunities. Collaboration with other land-grant universities has been initiated on research. The Northern New England regional economy has been adversely impacted by recession. This has motivated the region to initiate research to seek new economic opportunities for its natural resource-based industries in order to stimulate its rural economies.

Investigators have completed studies on apple preferences and promotional impacts, market opportunities for Dogfish, price efficiency of auction markets for fish, and market potential for frozen steamer clams; developed a frozen lobster product; and assessed the region's industry structure and capabilities for food processing. Forest product studies completed include an assessment of the profitability from use of ISO-9000 standards, evaluation of the technological opportunities for small scale forest product firms, and a description of global marketing opportunities.

Projects in progress include efforts to develop or improve seafood, potato, apple, and blueberry products and food processing methods and assessments of domestic and international markets for these products. On-site assessments continue to be made of European forest products market potentials, European buyer-seller relationships, the region's marketing infrastructure and implications, utilization of underused forest species as well as completion of an inventory of Northern New England forest resources. Two new studies include an assessment of market opportunities for malting barley and the impacts of the Canadian hardwood industry on the region's timber and forest products industry. An extensive effort has been made to develop technology and information transfer programs with other universities in the region to inform the region's producers and marketers of these opportunities and buyers of the availability of products and sources.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992 and 1993 was \$221,000 per year, \$400,000 for fiscal year 1994, and \$360,000 for fiscal year 1995. A total of \$1,202,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$37,830 State appropriations in 1992, \$25,063 State

appropriations in 1993, \$46,956 State appropriations in 1994, and the preliminary appropriation for 1995 is \$46,956 in State appropriations.

The research program is carried out by the University of Maine. This phase of the strategic plan may be completed in 1997.

RED RIVER CORRIDOR, MINNESOTA AND NORTH DAKOTA

The purpose is to conduct a program of research to assess emerging international trade opportunities for the Red River trade region and develop the means to be able to compete for such opportunities in order to stimulate economic development. Projects were initiated to assess the Corridor's transportation infrastructure, research and development capability, competitive position, export opportunities in Europe and Latin America, and trade strategies. Emphasis is placed on technology and information transfer to inform users and potential users. There is a regional need to find new and alternative markets to replace traditional markets that have little or no growth potential and to develop the capabilities to compete successfully for these markets. International trade is expected to support continued economic growth in this primarily rural, agriculturally dependent region.

The program has completed studies on transportation services and costs, the region's trade position on specialty crops and metal fabrication, agro-industrial research and development capabilities, and export opportunities through collaboration with Canada. Studies in progress include trade strategies of selected European regions and their implications for regional trade strategies, trade opportunities with Mexico, bilateral technology transfer among businesses in the region, assessment and implications of Latin American transportation systems on trade, opportunities and linkages between rural Mexico and the Red River region, and relationships between social structure and rural development. This grant will be used to fund projects to expand the use by rural businesses of state-of-the-art telecommunications technologies to expand markets and up-grade worker skills.

The work supported by this grant began in fiscal year 1992. The appropriation for fiscal years 1992-1993 was \$200,000 per year, \$188,000 in fiscal year 1994, and \$169,000 in fiscal year 1995. A total of \$757,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$4,300 State appropriations and \$2,269 miscellaneous for a total of \$6,569 in 1992; \$16,000 State appropriations, \$4,138

industry, and \$16,688 miscellaneous for a total of \$36,826 in 1993; and \$1,600 State appropriations, \$1,637 industry, and \$29,501 miscellaneous for a total \$32,738 in 1994. The preliminary allocation of non-federal matching funds for 1995 is \$2,000 State appropriations, \$7,500 industry, and \$6,500 miscellaneous for a total of \$15,000.

The research program is carried out by the University of Minnesota, Crookston, in collaboration with North Dakota State University. The researchers indicate that this phase of the program may be completed in fiscal year 1997.

REGIONAL BARLEY GENE MAPPING PROJECT

The objectives of this project are to: construct a publicly available medium resolution barley genome map; use the map to identify and locate loci, especially quantitative trait loci controlling economically important traits such as yield, maturity, adaptation, resistance to biotic and abiotic stresses, malting quality, and feed value; provide the framework for efficient molecular marker-assisted selection strategies in barley varietal development; identify chromosome regions for further, higher resolution mapping with the objective of characterizing and utilizing genes of interest; and establish a cooperative mapping project ranging from molecular genetics to breeding that will be an organizational model for cereals and other crop plants. Barley breeders nationwide need information about the location of agriculturally important genes controlling resistance to biotic and abiotic stresses, yield, and quality factors in order to rapidly develop new, improved cultivars and respond to disease and pest threats. This project provides that information along with appropriate molecular markers to track these traits through the breeding and selection process.

The original goal of this project remains to develop a restriction fragment length polymorphism map for barley and associated important genetic traits as a map to provide closely linked molecular markers for barley breeders. The project successfully mapped 300 molecular markers. Portions of the map are described as very dense and contain key location points for enhanced utility. The project is now using the map to locate quantitative traits loci of economic importance. These include genetic determinations for yield, maturity, rust resistance, plant height, seed dormancy, and components of malting quality. Technical papers have been published to report research results to the scientific community.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, \$153,000; fiscal year 1991, \$262,000; fiscal years 1992-1993, \$412,000 per year; fiscal year 1994, \$387,000; and fiscal year 1995, \$348,000. A total of \$1,974,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$203,760 from industry in 1991; \$212,750 from industry in 1992; \$115,000 from industry in 1993; and \$89,000 from industry in 1994; and \$35,000 from the State of Washington and \$108,000 in other non-federal funding in 1995.

Research is being conducted in the following states: Oregon, Colorado, Washington, Michigan, Montana, Idaho, North Dakota, Minnesota, Alaska, New York, and Virginia. It is anticipated that researchers will complete the program plan at the end of fiscal year 1997.

REGIONALIZED IMPLICATIONS OF FARM PROGRAMS

The purpose of this research is to estimate the impacts of farm, trade, and fiscal policies and programs and assess their alternatives on the economic viability of typical crop and livestock production operations located in different regions of the United States. There is a national need for research that provides an assessment and evaluation of the potential impacts of Federal farm, trade, and fiscal policies on the economic viability and competitiveness of farmers located in different regions of the United States. Policy impacts vary regionally because of differences in farm productivity, input costs, climate, and size. The research results are widely used by farmers and public policymakers concerned about minimizing policy and program inequities between regions.

The researchers have developed a farm level policy analysis system encompassing major U.S. farm production regions. This system interfaces with existing agricultural sector models used for farm, macroeconomic, and trade policy analysis. The universities have expanded the number and types of representative farms to 65. Typical farm models also are being developed for Mexico and Canada under a collaborative agreement for use in analyzing impacts of the North American Free Trade Agreement.

Studies completed this past year at the request of policymakers and farm groups include analyses of the impacts of wheat exports, rough rice marketing pools, impacts of the General Agreement on Tariffs and Trade on representative crop farms in the

U.S., elimination of the rice program, conservation reserve program impacts on farms in the Great Plains, and revised baseline projections for representative farms. Farm models have been updated and are ready for use to analyze policy options for the 1995 farm bill.

The work supported by this grant began in fiscal year 1990 and the appropriation for fiscal year 1990 was \$346,000. The fiscal years 1991-1993 appropriations were \$348,000 per year; \$327,000 in fiscal year 1994; and \$294,000 in fiscal year 1995. A total of \$2,011,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$288,843 State appropriations and \$46,773 industry for a total of \$335,616 in 1991; \$45,661 State appropriations in 1992; \$33,979 State appropriations in 1993; \$40,967 State appropriations in 1994; and \$161,876 State appropriations for 1995.

Research is being conducted by the Texas A&M University and University of Missouri. The principal investigators anticipate that this program should be essentially completed when the 1995 farm bill legislation is enacted.

RURAL DEVELOPMENT CENTERS

The Centers address a broad spectrum of problems facing rural people and places with integrated programs of research and outreach. They stimulate and focus the research of institutions of higher education on rural problems. They inform State and local governments, non-profit and volunteer groups, community organizations and small businesses. Most importantly, the Centers provide collaboration and coordination on regional and national issues to avoid duplication and speed the dissemination of research findings to the general public. At the national level, the Centers are the only rural development organizations positioned to effectively integrate research and programmatic outreach across the Land-Grant University system. In a review of the Centers by a national panel of rural experts, one reviewer commented that if the Centers did not currently exist, we would have to invent them because there is no other organization to do what they do. The regional and local needs for research are stated in the annual proposals of the Centers to the Agency. The precise topical focus of the proposals varies from year to year and across the four centers. Input to these proposals comes through an advisory panel and a board of directors which include individuals from local and State governments or other rural development interests at the grass-roots level. Thus, the specific need for the Centers'

research is dynamically determined and reviewed annually at regional and local levels. The principal researcher believes this research to be of national, regional or local need.

The original goal of the Centers was to regionally coordinate research and extension programs authorized under the Rural Development Act of 1972. Over time they have been increasingly looked to for both programmatic leadership and coordination and have emerged as the dominant regional and national rural development institution within the Land-Grant University system. A list of selected examples of the Centers' accomplishments follows: (1) A study in Arkansas, Texas, and Oklahoma found that retired new residents make about 74 percent of their expenditures in their new local area. This is a significant income transfer that results in a heavy economic multiplier effect on the local community. (2) In the West, a research program has expanded the application of a widely used county-based economic impact model so that it can be used with groups of counties. (3) Northeast Center sponsored research evaluated the social, economic, and political conditions most favorable to the development of successful farm enterprises at the fringe of metropolitan areas in the Northeast. The results of this study have helped planners and policy makers to integrate farming with other economic enterprises and residential communities at the rural/urban fringe.

Grants have been awarded from funds appropriated as follows: fiscal year 1971, \$75,000; fiscal year 1972, \$225,000; fiscal year 1973, \$317,000; fiscal years 1974-1981, \$300,000 per year; fiscal years 1982-1985, \$311,000 per year; fiscal years 1986-1987, \$363,000 per year; fiscal year 1988, \$475,000; fiscal year 1989, \$500,000; fiscal year 1990, \$494,000; fiscal years 1991-1993, \$500,000 per year; fiscal year 1994, \$470,000; and fiscal year 1995, \$423,000. A total of \$8,849,000 has been appropriated.

Non-federal funds available to the four Regional Centers for Rural Development were: fiscal year 1991, \$1,117,000; fiscal year 1992, \$790,000; and fiscal year 1993, \$900,000 for a total of \$2,807,000 across the three years for which there are complete data. In addition, incomplete data for fiscal year 1994 show over \$300,000 for that year.

The regional rural development centers are located as follows: Northeast Regional Center for Rural Development, Pennsylvania State University; North Central Regional Center for Rural Development, Iowa State University; Southern Rural Development Center, Mississippi State University; and Western Rural Development Center, Oregon State University. Most of the research

sponsored by the four regional centers is actually performed by resident faculty at land-grant universities in the respective region through subcontracts from the Center's grant. In addition, the special project at North Dakota State University is included in the appropriation. A specific termination date has not been identified.

RURAL ENVIRONMENTAL RESEARCH, ILLINOIS

This research was first funded in fiscal year 1991 and was continued through fiscal years 1992 and 1993. It was not funded in fiscal year 1994. These grants were awarded to the University of Illinois to support collaborative research with Western Illinois University, with cooperation from USDA Agricultural Research Service scientists at the National Soil Tilth Laboratory at Ames, Iowa, to study alternative farming systems to sustain environmental quality and agricultural sustainability. The general public and farming community are concerned about the impact of farm chemicals on soil viability, water quality, food safety and the cost of producing food. Agriculture chemicals in drinking water supplies are being found in many parts of the state. In west central Illinois, some rural communities are currently experiencing pesticide levels in their water reservoirs that exceed safe limits. Also, the effect of agricultural chemicals on soil health are not known and alternative production systems need to be developed. Thus, development of more sustainable farming systems is critical both to Illinois and the nation.

The original goal of this research was to determine the relationship of agricultural chemicals to soil health and to develop strategies for alternative agricultural production practices that control pests with reduced chemical input. The physical, chemical and biological traits of soils of an historically pesticide-free farm and an adjacent conventionally-managed farm has been completed. Cropping and management strategies have been initiated to bring weed pests under control on the no-pesticide farm without the use of chemicals.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal year 1991 was \$75,000; \$125,000 per year in fiscal years 1992 and 1993; and \$90,000 in fiscal year 1995. A total of \$415,000 has been appropriated. This grant was not funded in fiscal year 1994.

The non-federal funds and sources provided for this grant were as follows: \$7,500 state appropriations in each of fiscal years 1991 and 1992, \$13,152 state appropriations, \$2,320 industry,

and \$1,282 miscellaneous in fiscal year 1993; and \$9,762 state appropriations, \$1,635 industry, and \$5,670 miscellaneous in fiscal year 1994.

Research is being conducted on an 80-acre farm, historically free of pesticides, and an adjacent conventional farm near Macomb, Illinois. Both farms are privately owned and are comprised of productive Sable/Muscatine soils. Local farmers and agricultural industries are also participating in the research. The researchers anticipate that work may be completed in fiscal year 1996.

RURAL HOUSING NEEDS, NEBRASKA

Data on housing affordability have been collected in eight representative rural communities. These data are being compared to national data to determine the relationship of rural housing affordability to common indexes used nationally. Based on these analyses, four affordability indexes have been developed and are being assessed for use in examining the housing status of families in rural areas and to manage rural housing programs. Papers are being prepared and published on rural housing issues. This research will improve the information base for developing, implementing, and reviewing rural housing policies. The project will result in consistent approaches to measuring housing affordability in rural areas.

The goal of this project is to compare and contrast alternate housing affordability indexes using both national and State data. Housing affordability indexes are critical in managing housing programs and monitoring economic activity and opportunity. This project is intended to improve the accuracy of indexes used in rural areas and assist local communities to evaluate barriers to housing assistance. The researchers continue to conduct a series of focus group discussions with elected officials, government professionals, bankers, real estate sellers, developers, contractors, social workers, and community action agency representatives to identify barriers to housing policy implementation in small communities. These sessions, survey data, and ongoing analysis of national data are being used to develop policy statements and dialogue regarding rural housing for local leadership training.

The research began in March 1993. The appropriations were \$80,000 for fiscal year 1993, \$75,000 for fiscal year 1994, and \$68,000 for fiscal year 1995. A total of \$223,000 has been appropriated.

The non-federal funds and sources provided for this project were \$14,408 State appropriations and \$450 industry for a total of \$15,433 in 1993; \$29,104 State appropriations, \$1,150 industry, and \$1,325 miscellaneous for a total of \$31,579 in 1994; and \$27,166 State appropriations, \$475 industry, and \$8,215 miscellaneous for a total of \$35,856 in 1995.

The research is being conducted at the University of Nebraska with the University of Wisconsin as a subcontractor. The university researchers anticipate that the work funded in fiscal year 1995 will be completed in the fall of 1996.

RURAL POLICIES INSTITUTE

The Rural Policy Research Institute is a consortium of three universities designed to create a comprehensive approach to rural policy analysis. The Institute conducts research and facilitates public dialog to increase public understanding of the impacts of national and regional policies on rural people and places. There is a need to be able to estimate the impacts of changing programs and policies on rural people and places. Public policy decision support can provide timely and accurate estimates of the impacts of proposed changes to allow a more reasoned policy discussion and decision.

The Institute has completed a number of successful policy research projects and developed three analytic models central to its mission. These projects focus on the rural implications of health care, education, and telecommunications policy proposals. In addition, the Institute has used expert panels to synthesize policy decision support to a number of policy making groups at national and State levels. The current panels include over 40 scholars and policy experts.

The Rural Policy Research Institute will continue to use its research base and expert panels to respond to new requests from policy decision makers. Continuing research will strengthen the Institute's capacity to provide timely, accurate assessments of rural policy impacts.

The work supported by these grants began in fiscal year 1991 and the appropriation for fiscal year 1991 was \$375,000. The fiscal year 1992 appropriation was \$525,000; for fiscal year 1993, \$692,000; for fiscal year 1994, \$494,000; and fiscal year 1995, \$644,000. A total of \$2,730,000 has been appropriated.

Aggregated non-federal funds to support the Rural Policy Research Institute across the three universities involved include unrecovered indirect costs, salary support from university and other non-federal sources, and various other grants, contracts, and reimbursable agreements. They amount to \$316,458 for fiscal year 1991; \$417,456 in fiscal year 1992; \$605,302 in fiscal year 1993, and \$537,834 in fiscal year 1994. Estimates for fiscal year 1995 are \$584,516. Total to date is \$2,461,566.

The Institute's member universities are: the University of Missouri-Columbia; the University of Nebraska-Lincoln; and Iowa State University, Ames. However, the Institute's programs involve many of the best scientists in the nation and have included over 110 scientists from 10 scientific disciplines in 45 universities from 35 different States. This gives the Institute a truly national perspective even though it is administered through a three-university consortium. Current funding will sustain activity through September 1996.

RUSSIAN WHEAT APHID

This grant is for research that leads to control methods for the exotic pest, the Russian wheat aphid in wheat and barley. The primary approaches are biological control and genetic resistance in the crop. Considerable emphasis also is placed on developing predictive sampling and monitoring tools that enable producers to anticipate outbreak and to be prepared to take control measures when necessary. There are five state teams working in concert on these control measures. The work is coordinated through an on-going regional coordinating committee in the western part of the United States, and the western-most states of the north central and southern regions.

The Russian wheat aphid is an exotic pest that entered the western United States without its normal complement of biological control agents. Likewise, the commercially available germplasm for wheat and barley was not resistant to this pest. As customary with this kind of invading pest, foreign exploration was conducted to discover, characterize, and import exotic biological control agents and crop germplasm that could be incorporated into pest management tools. The regional coordination provides a medium for infusion and dissemination of research findings on the Russian wheat aphid pest to states other than the five included in this project. The five state project supports teams of scientists who work across state boundaries.

The original goal of this research was to develop control tactics and strategies for the Russian wheat aphid on wheat and barley. Resistant varieties of wheat, one variety in Colorado called "Halt", are being tested and released to breeders and seed companies for inclusion in product lines of wheat seed. Seed will be available to growers in 1996. Advancements in testing for genetic resistance has speeded the process of finding and evaluating resistant germplasm. Economic injury thresholds and control decision criteria have been developed and modified as needed to suit different production areas, varieties, and spring versus winter wheat. Monitoring of flights is being continued in order to provide farmers with an early alert to the presence of this pest aphid and others. Two new species and a new strain of parasitic wasps Biological control agents continue to be evaluated and pest management strategies are being refined to take advantage of parasitic and predaceous insects and pathogenic fungi.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$100,000; fiscal year 1990, \$346,000; fiscal year 1991, \$350,000; fiscal years 1992 and 1993, \$437,000 per year; fiscal year 1994, \$505,000 and fiscal year 1995, \$455,000. A total of \$2,630,000 has been appropriated.

The source and amount of non-federal funds by fiscal year for the participating states are as follows: Colorado supported this project in fiscal year 1992 with \$800,148 and in fiscal year 1993 with \$800,411 in state appropriations. Other non-federal funds from Colorado were \$15,000 for fiscal year 1992 and fiscal year 1993. State supported funds from Washington were \$158,377 in fiscal year 1991, \$166,127 in fiscal year 1992, and \$175,522 in fiscal year 1993. Other support from Washington was \$38,798 in fiscal year 1991, \$33,921 in fiscal year 1992, and \$31,454 in fiscal year 1993. From Oregon the state supported the project with \$92,132 in fiscal year 1991, \$105,536 in fiscal year 1992, \$113,592 in fiscal year 1993 and \$115,714 in fiscal year 1994. Idaho provided state support of \$102,175 in fiscal year 1991, \$164,287 in fiscal year 1992, \$172,564 in fiscal year 1993, and \$153,134 in fiscal year 1994. Other support from Idaho was \$104,775 in fiscal year 1991, \$55,926 in fiscal year 1992, \$66,973 in fiscal year 1993, and \$102,395 in fiscal year 1994. California supported this project in fiscal year 1993 and fiscal year 1994 with \$67,000 per year.

This research is being conducted by Washington State University, Oregon State University, University of Idaho, University of California, and Colorado State University. Research

will be completed in 1995 for Oregon and California, 1996 for Washington and Idaho, and 1998 for Colorado.

SEAFOOD HARVESTING, PROCESSING, AND MARKETING, MISSISSIPPI

Present research focus is to develop cost effective means to utilize seafood and aquaculture byproducts and wastes for value-added human foods. Research has been conducted on the utilization of Gulf menhaden and catfish for surimi production. Water use minimization in surimi processing has also been addressed. This research could aid economic development in Mississippi and will provide processors with data needed to reduce pollution. Efforts are also under way to address current FDA interests in closing Gulf oyster harvests during warm weather months due to the threat of infectious *Vibrio* bacteria.

National needs reflected in the project include providing consumers with affordable alternative seafood products. Alternative sources of seafood protein are needed because of a drastic decline in natural harvests due to overexploitation. Other national needs addressed in this project include reducing pollution during seafood and aquaculture food processing by converting byproducts into value-added food ingredients or materials. A regional interest for the Gulf coast is the potential devastation of the oyster industry if harvests are severely restricted during warm months. The present project seeks to provide alternative processing strategies to control foodborne disease agents in oysters. Locally, catfish processors are a major employer of the severely economically depressed Delta region of Mississippi. By further enhancing the value of catfish products, this project seeks to improve the livelihood of individuals both on the Gulf coast and in the aquaculture region of the state.

The work supported by this grant began in fiscal year 1990 when \$368,000 was appropriated for this project. The appropriations for fiscal years 1991-1993 were \$361,000 per year; fiscal year 1994, \$339,000; and fiscal year 1995, \$305,000. A total of \$2,095,000 has been appropriated.

The State of Mississippi contributed \$1,949 to this project in fiscal year 1991; \$41,286 in fiscal year 1992; \$67,072 in fiscal year 1993; and budgeted \$23,520 in fiscal year 1994. Product sales contributed \$7,044 in 1991, \$13,481 in 1992, and \$13,704 in 1993. Industry grants contributed \$14 in 1992 and \$31,796 in 1993. Other non-federal funds contributed \$80 in fiscal year 1991, \$838 in 1992, and \$17,823 in 1993. The total non-federal funds contributed to this project from 1991 through 1993 was \$195,087.

Research is being conducted by scientists in the Departments of Food Science and Technology and Agricultural Economics of the Mississippi Agricultural and Forestry Experiment Station at Mississippi State University and at the Coastal Research and Extension Center, Seafood Processing Laboratory, in Pascagoula, Mississippi. The principal investigators anticipate that the research supported through this grant will be completed by 1999.

SEAFOOD RESEARCH, OREGON

The project represents a cooperative effort between Oregon State University and the Pacific Northwest seafood industry. Researchers have been determining the optimum processing parameters for several value-added products made from Pacific whiting. The development of value-added products from the species requires identifying and adapting new technologies to minimize the enzyme-induced texture problems that currently occur with Pacific whiting products. Market evaluations of the products are being undertaken.

After two years of decreased harvests in salmon and some groundfish species, the West Coast seafood industry is looking toward the Pacific whiting fishery to maintain healthy coastal communities and a sound fisheries industry. At present, the majority of the West Coast seafood processing industry adds little value to the harvest. Pacific whiting value-added processing, as described by this project, could revolutionize the region's seafood industry and have a significant economic impact for the coastal region. These new processes developed for Pacific whiting will be transferable to other fish species.

The work supported by this grant began in fiscal year 1993. The appropriation for fiscal year 1993 was \$327,000, for fiscal year 1994 was \$306,000, and for fiscal year 1995 is \$275,000, for a total of \$908,000.

This project experienced initial success due, in part, to allied research funded by the Oregon Economic Development Department and the private regional seafood industry and estimated to be \$254,853. However, there are no non-federal funds directly listed for this grant.

Research is being conducted at the Oregon State University. The investigators anticipate that research will be completed in 1997.

SMALL FRUIT RESEARCH

The objectives of this grant are to improve the production and quality of small fruits in the Pacific Northwest through research on cold hardiness, breeding and genetics, and pest control. Washington, Oregon, and Idaho are important states for growing, processing, and marketing small fruits such as strawberries, blackberries, raspberries, grapes and cranberries. To remain competitive and expand markets, research is needed to help solve the myriad of problems that occur constantly.

Research progress to date for Oregon is the evaluation of new strawberry germplasm from Chile and North America for resistance to fruit rot, aphids, spider mites, and weevils; virus indexing of small fruit germplasm; better color stability of processed strawberries; increasing cranberry production through better weed control; and improving wine quality. Work is continuing in Washington on fruit physiology; cold hardiness of strawberries, grapes, and red raspberries; pest management of cranberries; and breeding of pest resistant strawberries. Idaho work continues on postharvest research for better marketability and adapting small fruit crops to high elevation growing conditions. For 1994, Oregon and Washington are jointly planning marketing studies to identify new market niches for berry crops and wines.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal year 1991 was \$125,000. The fiscal years 1992 and 1993 appropriation was \$187,000 per year. fiscal year 1994 was \$235,000, and fiscal year 1995 is \$212,000. A total of \$946,000 has been appropriated.

The nonfederal funds and sources provided for this grant were as follows; 1991, \$1,562,078 state appropriations, \$40,933 product sales, \$62,993 industry, \$357,266 other nonfederal; 1992, \$1,465,969 state appropriations, \$90,453 product sales, \$119,164 industry, \$287,976 other nonfederal; 1993, \$1,539,255 state appropriations, \$91,954 product sales, and \$161,141 industry, \$416,712 other nonfederal; 1994, \$368,375 state appropriations, \$45,430 industry and \$90,822 other nonfederal.

The research is being conducted at Oregon State University, Washington State University and the University of Idaho with Oregon State University as the lead university. The university researchers anticipate that work may be completed in fiscal year 1996.

SOIL AND WATER RESEARCH, OHIO

The Lake Erie research to be conducted under this project focuses on two concerns associated with the expanding use of conservation tillage: (a) the fate and transport of herbicides, and (b) the persistence of pathogenic crop viruses. The field work for this project will be concentrated in the Blue Creek watershed where other projects have active research on mitigation of agricultural impacts on water quality. The data collected will have direct application to the design of artificial wetlands for mitigation of surface water pollution.

Another phase of the research will investigate methods for detecting viruses in the potyvirus family. An assay will be investigated for detection of these pathogens in soils and runoff waters. The assay protocol and estimates of virus persistence may form a foundation for conducting regional surveys and designing crop management strategies.

The research focuses upon interactions between land use, agricultural practices and aquatic systems in the Maumee Basin. The work will generate data and analysis of nutrient cycling in the Basin, persistence of regionally important agricultural pathogens, and the efficacy of wetlands for mitigation of surface water pollution.

The work supported by this grant began in fiscal year 1993. The appropriation for fiscal year 1993 was \$240,000; for fiscal year 1994, \$188,000; and for fiscal year 1995, \$169,000; for a total of \$597,000.

The non-federal funds allocated for fiscal year 1995 are \$130,300. Since this is a new project, only current fiscal year funds are available.

The research is being conducted by faculty in the Biology Department at the University of Toledo in Ohio. The field location of the study is the Maumee Basin, the Maumee Bay and Lake Erie. The project proposal was written for a two-year duration with a completion date of June 1997.

SOUTHWEST CONSORTIUM FOR PLANT GENETICS AND WATER RESOURCES

New Mexico State University, Los Alamos National Laboratory, Texas Tech University, the University of Arizona and the University of California at Riverside entered into a cooperative interdisciplinary research agreement constituted as the Southwest

Consortium on Plant Genetics and Water Resources to facilitate research relevant to arid and semi-arid adaptation. The overall goal of the Consortium is to bring together multidisciplinary scientific teams to develop innovative advances in plant biotechnology and related areas to bear on agriculture and water use in arid and semi-arid regions.

The Southwest Consortium for Plant Genetics and Water Resources is addressing the need for an integrated program that identifies specific problems of southwest agriculture, coordinates water and biotechnology research aimed at solving these problems, and facilitates the transfer of this information for commercialization. The specific research objectives of the Consortium include the development of crops with resistance to: drought and temperature extremes; adverse soil conditions; and pest and parasites. The Consortium is also identifying technologies for improved water and nutrient delivery.

The original goal of this Consortium remains to facilitate research to provide solutions for arid and semi-arid crop adaptation. Five participating institutions have developed research plans consistent with the Consortium's goals. Sub-grants are awarded competitively following peer review to support research that would solve problems unique to southwest agriculture. Specific attention is given to interdisciplinary agricultural research. The Consortium has discovered a gene that makes plants more resistant to water stress. They have identified a genetic marker for salt tolerance and have compared a genetic system of wild plant species to domestic crops for differences in drought response. Also, one research team has cloned a gene from alfalfa that controls an important biosynthetic pathway, while another is working out the complex metabolism of salt tolerance in resistant plant types.

Grants have been awarded from funds appropriated as follows: fiscal year 1986, \$285,000; fiscal years 1987-1989, \$385,000 per year; fiscal year 1990, \$380,000; fiscal years 1991-1993, \$400,000 per year; fiscal year 1994, \$376,000; and fiscal year 1995, \$338,000. A total of \$3,734,000 has been appropriated.

The Consortium's host institution, New Mexico State University does not report matching funds from Consortium participants. New Mexico State University does report for its portion of funded research the following non-federal funds: \$80,000 state appropriations in 1992; \$100,000 in 1993; \$100,000 in 1994; and \$100,000 estimated in state appropriations for 1995.

Research is being conducted by a consortium of institutions comprised of New Mexico State University, Los Alamos National Laboratory, Texas Tech University, University of Arizona, and University of California at Riverside. New Mexico State University is the lead institution. It is anticipated that the work may be completed in fiscal year 1995.

SOYBEAN BIOPROCESSING, IOWA

Research continues to progress on identifying new genes or gene combinations that alter the fatty acid composition or glyceride structure of soybean oil, incorporating the new genetic systems into commercially acceptable cultivars, and producing sufficient seed of the new cultivars for large-scale oil extraction, refining, and product evaluation. The research efforts are increasing genetic variation in soybeans, will lead to the development of new cultivars, and will yield oils that can be used in broad food and industrial applications in the United States and abroad.

Nutritionists indicate that humans should reduce the amounts of saturated fats and hydrogenated oil products in their diets. The research has resulted in the identification of genes that will improve the nutritional quality of soybean oil by reducing the saturated fat content and eliminating the need for hydrogenation. The investigators are incorporating the genes into soybean varieties that can be grown commercially by farmers throughout the Midwest. The genes are available to public and private breeders to use in developing varieties for all the soybean growing regions of the United States. Uses of the modified oils for industrial applications are being investigated.

The goal of the research was to develop and commercialize soybeans with improved nutritional qualities and new industrial applications. In 1995, more than 50,000 acres of a new variety will be grown by farmers that will produce an oil that does not require hydrogenation to achieve a high level of stability. The first soybean oil with reduced saturates will be available to consumers in January 1995. In addition, commercial production of a new variety with reduced saturated fat content will commence in 1995.

The work supported by this grant began in fiscal year 1991 and the fiscal year 1991 appropriation was \$200,000. The appropriation for fiscal year 1992 was \$275,000. The fiscal year 1993 appropriation was \$328,000, in fiscal year 1994, \$308,000, and

in fiscal year 1995, \$277,000. A total of \$1,388,000 has been appropriated.

The project has been supported each year by the State of Iowa and industry cooperators. The non-federal State support was \$91,796 for fiscal year 1991, \$119,892 for fiscal year 1992, and \$133,609 for fiscal year 1993. Industry grants accounted for \$92,000 in fiscal year 1991, \$212,150 in 1992, and \$133,250 in 1993. It is estimated that the total non-federal funds for fiscal year 1994 were \$321,200.

Research is being conducted at Iowa State University and various experimental farms throughout Iowa. During the winter, work that does not involve measurement of yield is done in cooperation with the University of Puerto Rico. The research was initiated in fiscal year 1991 as a five-year project. The principal researchers anticipate that the primary goals of the research will be completed in 1996, using the fiscal year 1995 funding.

SOYBEAN CYST NEMATODE, MISSOURI

Research on soybean cyst nematode is focused on incorporating or enhancing high levels of resistance to the pest in soybean cultivars. Over 10,000 plant introductions from the world collection of soybean germplasm have been tested for resistance to soybean cyst nematodes. Forty-five lines have been identified as resistant to one or more strains of the nematode and one line, PI 437654, is resistant to all known strains in the United States. These resistant line are utilized in breeding programs to develop resistant soybean cultivars.

The overall goal of this project was to develop new soybean cyst nematode-resistant soybean varieties in combination with development of effective new management strategies. This program has led to the development and release of 12 new soybean cyst nematode-resistant cultivars for northern areas. The entire Soybean World Collection was screened for reaction to the most severe races of *H. glycines*. In double-cropping studies, soybean after wheat, there was no difference in nematode population densities when compared with full-season cropping. Blending of soybean seeds at planting, a mixture of resistant and susceptible cultivars, resulted in higher yields than resistant varieties planted alone. No definitive results have yet emerged from the conservation tillage studies. Basic studies using molecular genetic techniques to describe gene flow in the cyst nematode are continuing.

Grants have been awarded from funds appropriated as follows: fiscal year 1979, \$150,000; fiscal years 1980-1981, \$250,000 per year; fiscal years 1982, \$240,000 per year; fiscal years 1983-1985, \$300,000; fiscal years 1986-1989, \$285,000; fiscal year 1990, \$281,000; fiscal year 1991 \$333,000; fiscal years 1992-1993, \$359,000 per year; fiscal year 1994, \$337,000; and fiscal year 1995, \$303,000. A total of \$4,902,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$105,012 state appropriations, in 1991; \$84,368 state appropriations, in 1992; and \$168,017 state appropriations, in 1993; and \$118,725 state appropriations in 1994.

The research is being conducted at the Missouri Agricultural Experiment Station. According to the researchers, to more fully understand the biology of the pest and develop alternative cultivars and management strategies will require study through fiscal year 1998.

STEPP II - WATER QUALITY IN PACIFIC NORTHWEST

STEPP II, which began in 1991, is the second phase of the research and technology transfer project entitled, "Solutions to Environmental and Economic Problems". Field research projects evaluate the integrated effects of tillage systems, nutrient management, pest management, crop rotation, and innovative conservation practices on wind and water erosion, crop yields, profitability, and air, water, and soil quality. These systems are evaluated for different landscape positions, crop management units, and agroclimatic zones in Idaho, Washington, and Oregon. Growers learn about these conservation practices through on-farm testing, newsletters, presentations by researchers at grower meetings, and popular and scientific media. Soil erosion is a serious threat to the Pacific Northwest where most of the nation's soft white wheat, peas and lentils are produced. Ten million acres of highly productive cropland have one of the highest potential erosion rates in the nation. Inadequate erosion control has required farmers to increase production inputs to maintain crop yields. In addition, erosion causes millions of dollars in off-site environmental damage.

The primary goals are: to obtain and integrate new technical/scientific information on soils, crop plants, pests, energy, and farm profitability into sustainable management systems; to develop tools for assessing the impacts of farming practices on soil erosion and water quality; and to disseminate conservation technology to the farm.

STEEP II has helped Pacific Northwest producers to reduce soil erosion that sometimes exceeded 100 tons per acre per year to conservation compliance standards set forth in the Farm Bill. New farming practices have also improved groundwater and air quality.

STEEP II research and on-farm testing have also provided Washington, Oregon, and Idaho growers with management options for weed and disease control in winter wheat that maintain profitability while meeting conservation compliance. New cereal crop breeding and cultural practices research have reduced crop damage from leaf spot disease, root rot diseases, and Russian wheat aphid and other major pests. STEEP II has also helped growers reduce herbicide rates through use of longer crop rotations, closer scouting of weeds, and by managing for healthy crops.

Split nitrogen fertilizer applications and nitrogen applied at seeding improved yields at Pendleton, Oregon, in the absence of downy brome, emphasizing the importance of effective weed control. An analysis of the economic return for fungus control on resistant cultivars Gene and Madsen are underway. Cover crops improved soil aggregation and recovered significant amounts of summer applied fertilizer in the Willamette Valley. Stripe rust resistant versions of Colter barley were developed. Use of club wheat cultivar mixtures reduced stripe rust and increased yield. Seed treatments may reduce cephalosporium stripe and dryland root rot.

Multidisciplinary economic-ecologic modeling of highly erodible watersheds has provided much needed estimates of the region-wide on-site and off-site economic damage of conventional farming practices. Emerging results will provide farmers ways to convert terminating Conservation Reserve Program lands into sustainable agricultural and other uses.

The work supported by this grant began in fiscal year 1991, and the appropriations for fiscal years 1991-1993 are \$980,000 per year; in fiscal year 1994, \$921,000; and in fiscal year 1995, \$829,000. A total of \$4,690,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$938,812 state appropriations, \$63,954 product sales, \$156,656 industry, and \$16,994 miscellaneous in 1991; \$1,025,534 state appropriations, \$75,795 product sales, \$124,919 industry, and \$88,696 miscellaneous in 1992; \$962,921 state appropriations, \$62,776 product sales, \$177,109 industry and \$11,028 miscellaneous in 1993; and \$1,069,396 state appropriations, \$46,582 product sales, \$169,628 industry, and \$22,697 miscellaneous in 1994.

The work under STEEP II will be done at field research sites, farmers' fields, and laboratories in Idaho, Washington, and Oregon.

The original STEEP program was a 15-year program, initiated in 1975 and completed in 1991. The new STEEP II program was started in 1991, with the first phase planned to extend for five years.

SUNFLOWER INSECTS, NORTH DAKOTA AND SOUTH DAKOTA

The North Dakota and South Dakota Agricultural Experiment Stations continue short and long term research to manage sunflower insects. Their strategy is to select sunflower for resistance against leaf-feeding and seed-infesting insects. Sunflower is a world oilseed crop, second only to soybean as a field-grown edible oil source. Several economically important insects and diseases constrain the productivity of sunflower. North Dakota growers identify insects as the primary problem for sunflower production.

The goal of this research is to provide solutions to sunflower insect problems. Long term research on host resistance and understanding host/pest interactions to improve our management of sunflower insects is underway in North Dakota. Host resistance: Chemical and biochemical criteria are being used to assemble a group of sunflower lines with leaf-based host resistance. Accessions of wild and cultivated *annuus* sunflower and among non-*annuus Helianthus* species are being screened for elevated coumarin concentration in the search for specific chemicals formed for defense to leaf-feeding pests. The stress behavior of selected sunflower lines to fungal inoculation is being examined to discover lines resistant to various fungal pathogens. The field selection of putative resistant lines has provided candidate accession that are currently being tested for chemical attractiveness to red sunflower seed weevils. Host/Pest interactions: Plant characteristics utilized by the red sunflower seed weevil in locating and ovipositing on sunflower were determined. Clear varietal differences were found in the volatiles emitted by different varieties. It has been determined that elevated auxin levels are involved in the growth deformity associated with sunflower midge infestations. Data from tests to determine the effect of the red sunflower weevil on seed quality and yield and spatial distribution in oil sunflower are being evaluated. An analysis of all lines for specific content of phenylpropanoid chemical active against sunflower beetle and other leaf-feeding insects showed no strong correlation between the coumarins and the non-preference of sunflower beetles. This suggests that other, additional factors may be expressed in the plant which may be

necessary along with coumarin content to influence the feeding preferences of the beetles. It has been found that the highest non-preference responses by the sunflower beetle are in response to acetylsalicylate administered to a cut leaf through the petiole and that .06mM dose is most effect in inducing deterrence to feeding. In South Dakota work on the transformation of sunflower to improve insect resistance shows significant progress. Optimal times for sunflower shoot regeneration and development were determined. A modified assay to rapidly and accurately identify transgenic plants was developed by the addition of methanol to the assay solution. Modifications in the development media reduced vitrification of the shoots and improved shoot elongation thus allowing shoots to be placed on rooting media earlier.

Grants have been awarded from funds appropriated as follows: fiscal year 1982, \$72,000; fiscal year 1983, \$80,000; fiscal years 1984-1985, \$150,000 per year; fiscal years 1986-1989, \$190,000 per year; fiscal year 1990, \$188,000; fiscal year 1991, \$194,000; fiscal years 1992-1993, \$200,000 per year; fiscal year 1994, \$141,000; and fiscal year 1995, \$127,000. A total of \$2,262,000 has been appropriated. Approximately 25 percent of the funds have been allocated to South Dakota.

In fiscal year 1994, North Dakota expended \$59,290 on this project, \$58,090 from state appropriated funds and \$1,200 from industry grants. South Dakota has not reported non-federal funds.

This research is underway at the North Dakota and South Dakota Agricultural Experiment Stations. The current phase of this project is scheduled to end in late 1998.

SUSTAINABLE AGRICULTURE, MICHIGAN

The global objective of the 1995 project is to develop, and make available for farm application, technology for management of nutrients in agricultural operations and to document social, economic and environmental impacts resulting from adoption of these technologies in key areas of Michigan. The four major components of this effort address compost integration, rotational grazing, cover crops, and water table-nutrient contamination management.

Many animal and crop production systems are confined to small localized areas across the country. As a result, nutrients from organic and inorganic sources are concentrated and can cause substantial contamination of water. Water quality is especially vulnerable throughout the Midwest where these practices overlay aquifers. In Michigan alone, these areas are drained by more than

20,000 miles of slow-moving creeks and streams. Nutrients that make their way into groundwater must be reduced to levels that maintain an ecologically and socially acceptable equilibrium. Systems approaches to nutrient management and adoption of new technologies are needed to reduce environmental loading from agricultural land.

The work supported by this grant began in fiscal year 1994 with an appropriation of \$494,000. Fiscal year 1995 appropriation is \$445,000 for a total of \$939,000. The matching funds dedicated to this research includes state funds in the amount of \$511,900 in fiscal year 1994.

Research is being conducted by Michigan State University at multiple locations. Field locations for the study include university experimental sites and numerous operating farms across the state. At the Kellogg Biological Station, the Living Field Laboratory was established in 1994 and is an essential resource for achieving long-term objectives, including studies of compost integration, rotational grazing and cover crops. Rotational grazing will also be conducted at the Lake City and Upper Peninsula Experiment Stations. Water table management studies will be located at the Fennville Research Station and three additional sites near Breedsville, Saignaw and Paw Paw. The university researchers now state that this is a long-term initiative and that the overall goals and objectives will not be completed until approximately the end of fiscal 1999.

SUSTAINABLE AGRICULTURE AND NATURAL RESOURCES, PENNSYLVANIA

Pennsylvania State University has conducted a local competitive grants program for this project. Three research projects are under way. 'Manure Management' compares the chemical properties of composted manure with raw manure, as well as the characteristics of soil containing manure. These studies will determine when composting is appropriate, how much it costs to compost, what the trade-offs are, and how farmers can incorporate composting into their operations. 'Nutrients and Vegetable Crops' studies the use of composted urban waste as a soil treatment in vegetable production. By comparing plants grown in soils treated with different organic matter and a chemical fertilizer mix, researchers are learning how root systems are affected by the different soil mixes. To learn more about the impact of vegetable cropping on the environment, the rate and volume of nutrients that leach into groundwater and run off fields into streams is being determined. 'Pesticide Use' research for reduction of chemical pesticides used for orchards has been especially challenging

because of the multitude of different pests associated with deciduous tree fruit production. To help Pennsylvania's apple growers, researchers are developing advanced integrated pest management programs using mating disruption to deter one of the most serious apple pests, the tufted apple bud moth.

The project began in 1993. The goal is to enhance the economic viability of Pennsylvania agriculture in an environmentally sound manner. Each of the three awarded nutrient studies research projects addresses this goal and seeks more sustainable agricultural systems and practices for adoption by farmers in Pennsylvania.

The work supported by this grant began in fiscal year 1993. The appropriation for fiscal year 1993 was \$100,000, and \$94,000 per year in fiscal years 1994 and 1995 for a total of \$288,000.

A total of \$95,796 in matching support from university, state and private industry was provided in fiscal year 1994.

Research will be conducted at Pennsylvania State University and with cooperators throughout Pennsylvania. Projects supported by fiscal 1994 funds will be completed in 1996.

SUSTAINABLE AGRICULTURE SYSTEMS, NEBRASKA

This research builds on the work begun in 1992 with the global objective of investigating and developing management strategies to increase the biological and economic efficiency of farming systems that integrate cropping and livestock production on a farm or in a watershed. A second broad objective of this project is to provide seed money to four research and extension centers in Nebraska to address local research and demonstration needs in the area of sustainable agriculture and to stimulate grant writing. This project integrates five major departments in designing crop/animal production systems that will contribute to better use of resources such as manure, and improve water quality in agricultural areas.

To address the overall objective of an integrated sustainable crop/animal system, the Integrated Farm project was established at the University of Nebraska, Lincoln's Agricultural Research and Development Center --ARDC-- near Mead, Nebraska. A team of 15 researchers from several disciplines helped in the design, implementation and demonstration of research activities at the Integrated Farm. Scientists are learning the benefits of looking at farming systems holistically, and many are now incorporating

their research projects into the Integrated Farm. Activities at the four additional sites include: limited irrigation research in west central Nebraska; a study on the rewards and risks of using winter wheat for supplemental forage in western Nebraska; investigation of various resource-efficient practices such as strip cropping, crop rotations, application of varying levels of manure and herbicides on eight minifields in northeast Nebraska; and design an implementation of integrated cropping systems trials involving limited irrigation dryland systems with corn, grain sorghum and soybeans in south central Nebraska.

The work supported by this grant began in fiscal year 1992 and the appropriation for fiscal years 1992 and 1993 was \$70,000 per year, \$66,000 for fiscal year 1994, and \$59,000 for fiscal year 1995. A total of \$265,000 has been appropriated.

The matching funds dedicated to this research includes state funds in the amount of \$25,313 in fiscal year 1992, \$26,384 in fiscal year 1993, \$27,306 in fiscal year 1994, and \$36,091 in fiscal year 1995. A total of \$111,094 has been provided in state funds as matching.

Research is being conducted by the University of Nebraska at five locations across the State with the major focus at the Agricultural Research and Development Center near Mead, Nebraska. The university researchers anticipate that the planned work will be completed in fiscal year 1995. It is anticipated that this 4-year project will catalyze other sources of long-term funding.

SWINE RESEARCH, MINNESOTA

The Swine Center at the University of Minnesota has funded research projects identified by a university/industry strategic planning process to address problems important to the swine industry of the State. An internal review process is established to assess the need and scientific merit of proposals developed by the University of Minnesota faculty. Projects were funded in 1993 to investigate the: effectiveness of technology transfer through area-based pork producer alliances in the control of pseudorabies virus spread among state herds; use of early weaning on growth factors; use of a swine production information system to determine the contribution of facility utilization to herd production; role of antibody in Porcine Reproduction and Respiratory Syndrome virus infection; metabolic connections between nutrition and sow performance with emphasis on amino acids; and milk production levels on the efficiency of dietary lysine conversion into milk proteins. The fiscal year 1994 grants support research on a number

of issues related to early weaning systems and management practices.

The original goal was to encourage interdisciplinary research among scientists to address a number of problems impacting the swine industry. The grant has provided support to projects that have produced research results that improve environmental management practices in confined units, strategies that use medicated early weaning practices in the rearing of pigs, and improved nutrient management practices for the swine herd.

Grants have been awarded through appropriated funds as follows: \$140,000 per year for fiscal years 1992 and 1993; \$132,000 in fiscal year 1994; and \$119,000 in fiscal year 1995. A total of \$531,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$160,694 State appropriations, \$216,495 industry, and \$25,800 from other non-federal appropriations in 1992; \$192,206 State appropriations and \$200,291 industry in 1993; and \$151,185 State appropriations and \$412,155 industry in 1994.

Research is being conducted at the University of Minnesota Swine Research Center. The efforts are proposed to be completed in fiscal year 1997.

TROPICAL AND SUBTROPICAL RESEARCH

Cooperative State Research, Education, and Extension Service is operating the program in coordination with the Caribbean Basin Administrative Group --CBAG and the Pacific Basin Administrative Group-- PBAG. State Agricultural Experiment Stations that are members of CBAG are Florida, Puerto Rico, and the Virgin Islands; members of PBAG are Hawaii and Guam.

Non-member institutional interests are represented by the Executive Director of the Southern Region Agricultural Experiment Station Directors, who is a member of CBAG, and the Executive Director of the Western Region Agricultural Experiment Station Directors, who is a member of PBAG. The Agricultural Research Service --ARS-- also has representation on CBAG and PBAG.

Funds for the program are divided equally between the two Basin Administrative Groups. The research objective of the program is to improve the agricultural productivity of many of the subtropical and tropical parts of the United States. Special research grants have been awarded, using a peer review and

competitive process, for research on controlling insect, disease and weed pests of crops; increasing the production and quality of tropical fruits, vegetables and agronomic crops; promoting increased beef production through development of superior pastures; detection of heartwater disease of cattle and the influence of heat stress on dairy cattle reproduction; better use of land and water resources; and potential for growing new speciality crops.

Examples of research being funded are the use of biotechnology to control fruit tree diseases; genetic engineering of papaya to obtain virus resistance; genetic engineering of papaya for extended postharvest shelf life. Other examples of new research being funded are production of taro in former sugarcane fields; examining the papaya root system for improved yields; control of virus diseases of cucurbits in tropical areas; control measures for viruses and other diseases of taro, cocoyam and other aroids; control of thrips on melons; breeding and biotechnology for forage yield, quality and persistence in the tropics; improved reproduction of dairy cows; pigeon peas and weed management in tomatoes and peppers; and economic analysis of recirculating systems for raising fish.

The operation of the tropical and subtropical research program was transferred from ARS to CSREES, with CSREES funding being first provided in fiscal year 1983. Funds in the amount of \$2,980,000 per year were appropriated in fiscal year 1983 and 1984. In fiscal year 1985, \$3,250,000 was appropriated. In fiscal years 1986, 1987, and 1988, \$3,091,000 was appropriated each year. \$3,341,000 was appropriated in fiscal year 1989. The fiscal year 1990 appropriation was \$3,299,000. The fiscal years 1991-1993 appropriations are \$3,320,000 per year; \$3,121,000 in fiscal year 1994; and \$2,809,000 in fiscal year 1995. A total of \$41,013,000 has been appropriated.

For fiscal year 1991, \$3,249,608 of nonfederal funds were provided to the tropical and subtropical program. Of the total, \$3,023,219 were state appropriations, \$87,892 were product sales, \$109,122 were industry grants and \$29,375 came from miscellaneous sources. For fiscal year 1992, \$2,875,213 of nonfederal funds were provided. These funds came from state appropriations of \$2,652,781, product sales of \$48,105, industry grants of \$89,803, and \$84,524 from miscellaneous sources. The nonfederal support for this program in 1993 was \$4,050,000 for state appropriations.

This research is being conducted in Florida, Puerto Rico, Virgin Islands, Hawaii, and Guam. The scientists have not established a termination date.

TAXOL CULTIVATION

Commercial use of ornamental yew clippings for the extraction of taxanes will hopefully be encouraged as a result of this program. The goal of this phase of the program is enhancement of taxane biosynthesis through application of specific chemical to *Taxus* plants. Sustainable agriculture in the Northeast could benefit if the cultivation of plant material for its pharmaceutical value is successful.

The overarching goal is to establish *Taxus* needle biomass from ornamental cultivars as an alternative and to supplement the source of taxol for antineoplastic uses. Potentially, the outcome of this project could stimulate pursuit of "farmaceuticals," that is compounds derived from plants which have been cultivated specifically for their medicinal, industrial, and agricultural applications.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$47,000, and for fiscal year 1995, \$42,000. A total of \$89,000 has been appropriated.

In fiscal year 1994 the State of Connecticut provided \$51,423 for Taxol research. In fiscal year 1995 the State of Connecticut will provide \$55,801.

The Taxol research will be conducted at the Connecticut Agricultural Experiment Station, New Haven, Connecticut. The researchers anticipate that the work may be completed in fiscal year 1999.

TILLAGE, SILVICULTURE, WASTE MANAGEMENT, LOUISIANA

This research has three components: Tillage is focussed on determining the best management method for rice fields; waste management on alternate management practices for both dairy and poultry operations; and silviculture is defined by Louisiana's Bald Cypress forest. Rice fields are located in the mid-south and California, but rice is a viable crop; thus while the rice-growing region is limited, the market impact is global. Waste management is a major concern throughout the region and nation. The development of best management practices to reduce or eliminate impacts on the environment are applicable everywhere. The development of coproducts or the reduction of waste costs is a nationwide target. Bald Cypress silviculture is limited to the southern Gulf and local areas further north. This species has many

attributes; and its management, when defined, will add greatly to economic and environmental goals for the nation.

The work began in fiscal year 1994. The appropriation for fiscal year 1994 was \$235,000, and for fiscal year 1995, \$212,000. A total of \$447,000 has been appropriated.

State funds contributed to this area of research is in excess of \$750,000 for fiscal year 1994.

The Louisiana State University Research Center is the recipient of this grant. The work has been planned for four additional years. As with much of this type of research, long-term benefits and long-term reaction to imposed management is necessary to assure that results and conclusions are valid.

URBAN PESTS, GEORGIA

This research is focused on urban pests with specific emphasis on termites and ants. The objectives of this research are to establish decision criteria and design strategies for the management of household and structural insect pests. Subterranean termites and other insects are significant economic pests in the southeastern United States and Georgia. In Georgia, damage and costs of control for termites and ants were estimated at \$51.6 million in 1990 alone. Chemicals currently registered for controlling these pests are both less efficacious than desired and applied at an intensity that exceeds most agricultural settings. These issues combined with the increasing concern of environmental health indicate the need for an integrated approach to control incorporating components of population monitoring, traditional and nontraditional systems of delivery and microbial control. The integrated approach will enable judicious, timely applications of insecticides or alternative strategies to replace scheduled pesticide treatments.

This research is focused to provide decision criteria and design strategies for the management of household and structural insect pests. Following are some of the research accomplishments over the past year. Soil types have been determined to effect the toxicity of termiticides and methods are being developed to increase the effective distribution of termiticides in soils using wetting agents and screening novel compounds for their potential as soil termiticides. It has been determined that there are chemical clues that "tell" termites where to feed and that they do not feed at all potential food sites in a random manner. Prolonged periods of rainfall and saturated soil conditions are a major mortality

factor in the population dynamics of subterranean termite colonies. Preliminary data indicate termites spend as much as eight hours each day not consuming oxygen. This may be related to the maintenance of low oxygen tensions in termite tissues to preserve the anaerobic hindgut conditions necessary for the survival of their symbiotic protozoans. Wood consumption by a termite colony at a given site is equal to approximately seven inches of 2x4 lumber each year. Termite foraging and feeding behaviors are seasonal. November to March represents a period of low activity. In the Southeast there are at least three termite species and expected behavioral differences; DNA analyses are being developed to identify species. An undescribed nematode species has been found infecting the dampwood termite and its pathogenicity to subterranean termites is being determined. Argentine ants have a preference for sugar over starch, fat, or protein. Several non-insecticidal materials have been identified as ant repellents and are being studied for their potential use in sensitive areas such as hospital operating rooms.

The research supported by this grant began in fiscal year 1991, and the appropriation for fiscal years 1991-1993 was \$76,000 per year. In fiscal year 1994 the appropriation was \$71,000, and \$64,000 in fiscal year 1995. A total of \$363,000 has been appropriated.

The non-federal funds and sources provided for this grant by fiscal year were as follows: 1991 - none, 1992 - \$26,020, 1993- \$8,100, 1994 - \$59,539 and 1995 - \$59,539.

This research is underway at the Georgia Agricultural Experiment Station in Griffin, Georgia. The current objectives on termites and ants will require a minimum of two years to complete.

VALUE ADDED WHEAT PRODUCT DEVELOPMENT PROGRAM, KANSAS

The goal of this project is to increase the utilization of wheat in food and nonfood applications. The approach is to identify potential applications, do market research to define the best opportunities, and in conjunction with industrial partners, develop the required products or technology. Results of the research will be transferred to private industry for commercialization. Initial targets include: identity preserved wheats, industrial applications of wheat, snacks, and noodles.

Kansas is the leading producer of wheat, and new value added uses are needed to expand wheat markets and improve economics for Kansas and regional wheat growers. In addition, to successfully

achieve the Food Pyramid nutrition national goals, new wheat based products are required since wheat represents 70 percent of the U.S. consumption of grains. Wheat presently represents 1 percent of the industrial grain use in the U.S. Research to capitalize on the unique properties of wheat could significantly increase wheat's share and the total quantity of environmentally friendly, renewable resource products in U.S. markets.

This work is an expansion of research funded by the Kansas Wheat Commission, Kansas Value Added Center and others with the goal of expanding wheat use. In the first 6 months of funding, a method for determining wheat gluten quality has been developed, which is important to baking industries and industrial uses. We have completed a survey of market opportunities for identity preserved wheat and are working with a Kansas cooperative on implementation. Work is underway on several snack, noodles, and industrial applications of wheat.

The work supported by this grant began in fiscal year 1994. The appropriation for fiscal year 1994 was \$235,000, and \$212,000 in fiscal year 1995. A total of \$447,000 has been appropriated. In 1994, \$114,990 was provided by non-federal sources for value added research.

This work is conducted by Kansas State University's Agricultural Experiment Station, Department of Agricultural Economics and Department of Grain Science and Industry. Industrial cooperators have been identified for most of the work in progress. The project is phased through 5 years. Each product objective will require about 6 months of market research and 18 months or longer of development time. Thus, there will be a series of partial completions beginning in the second year and continuing throughout the project.

WASTE UTILIZATION, NORTH CAROLINA

The research on the Waste Utilization grant will involve evaluation of alternative procedures for the development of value-added coproducts from manures, litters, mortalities, hatchery by-products, feathers and hair, processing offal, and processing sludge from animal production facilities. The results of this research has national, regional, and local impacts, since the solutions to the problems associated with waste are throughout the industry. Development of products from this material could reduce costs and, therefore, prices to the consumer nationwide.

This research was funded in mid 1994; however, the program has been ongoing since 1990 when several task forces were established. There are more than 50 faculty involved in 70 projects. Projects were selected competitively. It has become difficult to separate accomplishments since the funds are commingled. An Animal and Poultry Waste Management facility is planned and will be partially equipped with these funds.

The work supported by this grant began in fiscal year 1994. The fiscal year 1994 appropriation was \$414,000, and fiscal year 1995 is \$373,000. A total of \$787,000 has been appropriated.

The State of North Carolina through its Agricultural Experiment Station carries the salaries and fringe benefits of nearly 50 scientists and technicians working in this Animal and Poultry Waste Management project.

The work is being accomplished at the North Carolina State University through the Agricultural Experiment Station, Raleigh, North Carolina. The plans are to complete the current project within the next three years.

WATER CONSERVATION, KANSAS

To estimate the longevity of subsurface drip irrigation systems in the Central Great Plains using calculations of annual system performance deterioration based on nine years of operating pressures and flow rates and four additional years of data to be obtained in this study.

To develop efficient irrigation management procedures for subsurface drip irrigation systems for corn; to estimate and compare the costs and returns from using alternative irrigation systems, including center pivot, gated pipe, drip, and Low Energy Precision Application, for the major irrigated crops in western Kansas; and to increase the availability of irrigation research information and best management practice recommendations to Kansas irrigators through a series of extension bulletins and updates based on research-based information.

Considerable progress has been made toward completing objectives one and two. Advanced studies will be conducted in 1995 to determine the optimum levels of profile soil water depletion consistent with both high corn production and efficient management of precipitation and drainage.

Irrigation costs for systems typical of western Kansas, center pivot and gated pipe, as well as alternative irrigation methods, drip, surge, and Low Energy Precision Application will be estimated using a microcomputer program. The computer program will be based on the Irrigation Cost Estimator and System Evaluator program. The program estimates irrigation costs under a variety of operating conditions and evaluates adjustments of irrigation systems for efficient and economical water use.

Field studies were conducted at Colby and Garden City, Kansas in 1993 to evaluate the water requirements of subsurface drip-irrigated corn. An advanced study was initiated at Colby to evaluate water use efficiency and crop water stress. Extremely wet weather during the growing season limited progress on these studies. A system longevity study was not affected by weather conditions. The fiscal year 1994 grant supports research through May 1995. The fiscal year 1995 grant proposal supports research through fiscal year 1996.

The research goal is to determine the feasibility of drip irrigation in western Kansas to sustain irrigated corn production to support the beef feedlot industry. The project also supports an educational effort through collection and dissemination of information on efficient irrigation methods.

An analysis of field data to evaluate the water requirements of subsurface drip-irrigated corn was completed in 1994 and a paper has been submitted to a refereed journal. The second year of an advanced study was conducted at Colby to evaluate the water use efficiency of high frequency deficit subsurface drip irrigation for corn production. The 1994 results indicated that corn yields were significantly reduced by delaying the deficit irrigation event until 5:00 p.m. There has been significant technology transfer from the project. Three papers have been accepted for the upcoming Fifth International Microirrigation Congress. Six extension publications have been published and six more are currently under editorial review prior to publishing.

The work supported by this grant began in fiscal year 1993 with an appropriation of \$94,000; \$88,000 in fiscal year 1994; and \$79,000 in fiscal year 1995. The total funds appropriated are \$261,000.

The non-federal funds and sources provided for this grant were as follows: \$781,232 state appropriations, \$55,205 product sales, \$60,907 industry and miscellaneous in 1991; \$868,408 state appropriations, \$37,543 product sales, \$35,484 industry and

miscellaneous in 1992; \$833,324 state appropriations, \$54,964 product sales, \$144,225 industry and miscellaneous in 1993. Amounts for fiscal year 1994 are not available.

The research is being conducted at Kansas State University. The field portion of the research is being conducted on Experiment Stations at Colby and Garden City, Kansas. The university researchers have projected five years of data collection with completion of the project in 1998.

WATER MANAGEMENT, ALABAMA

Objectives of the current research effort in Water Management in Alabama are to: determine the effects of forest harvest, site preparation and reforestation on the water quality of small watershed streams; determine the contamination and surfactant-enhanced cleanup of the subsurface of organic liquids heavier and lighter than water; determine the effectiveness of a constructed wetland system to manage swine lagoon effluent; determine factors to include agricultural water management practices among states; and assess the bioavailability of nitrogen and phosphorus in poultry waste and their utilization as plant nutrients and as possible sources of water contamination.

The fiscal year 1994 grant supports research through August 1997. The funds allocated in 1993 were used to support research on the effect of landfill waste on water quality, to continue investigations on reducing non-point source water pollution from agricultural and forestry production, and the harvesting and storing of water for irrigation. The Cooperative State Research, Education and Extension Service is currently reviewing the proposal from Auburn University for 1995 funds.

The original goal of this research is to better understand and provide solutions for a range of water management and environmental concerns facing farmers and rural communities in Alabama and surrounding states. Results of research have demonstrated that long-term broiler litter applications increased the organic carbon and total nitrogen to depths of six and twelve inches as compared to non-littered soils. Extractable phosphorus concentrations were more than six times greater in littered soils. These results have implications for the quality and safety of groundwater used to supply potable water. Surface-applied, noncomposted organic wastes, such as newsprint, wood products, and yard waste print increased the organic matter on average by 89 percent. Harvesting and storage of water provides an alternative to groundwater for irrigation purposes. Water flow was the highest

during the winter months, suggesting that this is the best period for harvesting the water with minimal effects on the environment.

Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$300,000; fiscal year 1990, \$395,000; fiscal year 1991, \$397,000; fiscal years 1992 and 1993, \$398,000 per year; fiscal year 1994, \$374,000; and fiscal year 1995, \$337,000. A total of \$2,599,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$91,938 state appropriations, \$9,643 product sales, \$8,147 miscellaneous in 1992. No non-federal funds were reported by Auburn University for this grant in fiscal years 1991, 1993, or 1994.

Research is being conducted at Auburn University. It is anticipated that some of these research studies will be completed during fiscal year 1996, with the rest of the project to be completed in fiscal year 1997.

WATER QUALITY

The Cooperative State Research, Education, and Extension Service continues support of the national, competitively-awarded Special Research grants program in Water Quality as part of the Department of Agriculture's Water Quality Initiative. This program supports research to investigate the impacts of non-point source pollution from agriculture on water quality, and to develop improved, sustainable agricultural practices and systems that protect the environment and are economically profitable. Also, this program supports research on five Management Systems Evaluation Areas as part of the Midwest Initiative on Water Quality to develop new farming systems that protect water quality, with research located at 10 sites throughout the Corn Belt. This program is conducted jointly with the State Agricultural Experiment Stations, Agricultural Research Service, U.S. Environmental Protection Agency, U.S. Geological Survey, Natural Resources Conservation Service, Extension specialists and other Federal, state, and local agencies. The Water Quality grants have supported 214 research projects across the country. In fiscal year 1994, the request for proposals in the Water Quality Special Research Grants Program resulted in 107 grant proposals received. Due to limited funds, only five proposals were selected for awards by the peer review panels. In addition, four water quality research grants were awarded jointly with the Sustainable Agriculture Research and Education Program, and funds were awarded to the five Management Systems Evaluation Areas projects in the Midwest to continue the

water quality systems research started in 1990. A total of 14 grants were made with awards ranging from \$150,000 to \$400,000 for a funding period up to three years.

Concerns have been raised by the public about the possible risks to the environment and soil and water quality by the use of agricultural chemicals. Better methods of detection of very minor amounts of chemicals in water have made the public, farmers, and policymakers more concerned about use and management of these agricultural chemicals and wastes, while meeting the challenge of maintaining the efficiency and productivity of agricultural production systems. Water quality continues to be of high priority at local, regional and national levels. Results from the research is providing technologies to reduce pollutants, guidelines for site specific farming and improved farming systems. The principal researcher believes this research to be of national, regional or local need.

The original goals of the Cooperative State Research, Education and Extension Service Special Research Grants Program in Water Quality were to determine the extent to which agriculture has impacted groundwater quality, and to develop new and improved and cost-effective agricultural systems that enhance ground and surface water quality. Major progress has already been made on these goals. Examples of some of the results of recently completed research include the following:

An inexpensive method of detoxifying pesticide containers and pesticide rinseates has been developed by the use of immobilized microbial cells that survive in the soil and effectively degrade pesticides under field conditions. This technique could be very helpful in making easier and safer the disposal of empty pesticide containers, tank rinse waters, spilled materials, and equipment wash waters.

Scientists have developed a controlled intermittent spot sprayer that is equipped with sensors that detect weeds, and that this spot sprayer applies chemicals only where needed to control patches of weeds. This reduces the amount of chemicals used and the amount that reaches the soil and groundwater.

New approaches to crop and weed management have been developed to reduce herbicide use without increasing soil erosion. The use of hairy vetch as a cover crop in the Southeastern U.S. effectively suppressed weeds in no-till systems, eliminating the need for standard herbicides from the system.

A Presidedress Nitrate Test has been developed for predicting the amount of nitrogen fertilizer needed for corn in northeastern U.S. states, to reduce excessive applications of nitrogen and reduce nitrate leaching. Results indicate that use of the Presidedress Nitrate Test reduced nitrogen fertilizer use for corn by thirty percent compared to a routine recommendation system, with significantly less nitrate left in the soil profile for potential for leaching to groundwater.

The work under the Water Quality Program began in fiscal year 1990 with an appropriation of \$6,615,000. The fiscal year 1991 appropriation was \$8,000,000; the fiscal year 1992 appropriation was \$9,000,000; the fiscal year 1993 appropriation was \$8,950,000; the fiscal year 1994 appropriation was \$4,230,000; and the fiscal year 1995 appropriation is \$2,757,000. A total of \$39,552,000 has been appropriated for Special Research Grants on water quality.

The non-federal funds in support of the Water Quality program, provided by state appropriations, industry, product sales and other local sources, have averaged approximately \$1,000,000 per year since the program began. In addition, substantial support has been provided by other federal agencies.

The awards under the national competitively-selected Water Quality Special Research Grants Program have been made in almost every State. Work is being carried out in all parts of the country. The Management Systems Evaluation Areas of the Midwest Initiative on Water Quality are headquartered in Iowa, Minnesota, Missouri, Nebraska, and Ohio, with satellite locations in North Dakota, South Dakota, and Wisconsin.

The researchers funded under the Water Quality Special Grants Program have produced significant progress on improved understanding of the impacts of agricultural practices on surface and ground water pollution, and in developing improved agricultural systems that are sustainable both economically and environmentally. Implementation of some of these recommended new practices is already underway in a number of states. The focus over the next five years will be on developing and implementing farming systems that utilize the results from the past water quality research. The March 1995 Water Quality Users Conference will bring together research findings and new technologies that have been developed. The research over the next five years will emphasize development of production systems that are economical, efficient in use of resources and friendly to the environment.

WHEAT GENETICS, KANSAS

This project provides partial support for the Wheat Genetics Resource Center at the University of Kansas, which focuses on collection, evaluation, maintenance and distribution of exotic wheat related germplasm. Most cultivated varieties of wheat are derived from common sources. They lack the rich genetic diversity needed to develop resistance to diseases, insects and environmental stress. The replacement of genetically rich primitive cultivar and land races by modern, more uniform cultivars all over the world is causing erosion of wheat germplasm resources. New pests or those that have overcome varietal resistance pose a constant threat to the nations wheat production. Genetic resistance often resides in wild relatives of wheat. This program which was established in Kansas is providing service to wheat breeders nationwide.

The original goal of this research was to enhance the genetic diversity available to wheat breeders nationally and internationally by collecting, evaluating, maintaining and distributing germplasm of derived from wild relatives of wheat. To date twenty five germplasm releases containing new genes for such pests as Hessian fly, greenbug, leaf rust, soilborne mosaic virus and Russian wheat aphid. Germplasm stocks with resistance to leaf rust and powdery mildew are under development. Evaluation of germplasm for important resistance genes was carried out by Center scientists and cooperating institutions.

Work supported by this grant began in fiscal year 1989. Appropriations were, for fiscal year 1989, \$100,000; fiscal year 1990, \$99,000; fiscal year 1991, \$149,000; fiscal years 1992-1993, \$159,000 per year; fiscal year 1994, \$196,000; and fiscal year 1995, \$176,000. A total of \$1,038,000 has been appropriated.

The nonfederal funds provided for this grant were as follows: \$493,285 state appropriations, \$31,414 product sales, and \$84,610 other nonfederal in 1991; \$414,822 state appropriations, \$14,259 product sales, and \$102,086 other nonfederal in 1992; and \$533,848 state appropriations, \$32,297 product sales, and \$163,937 nonfederal in 1993, and \$468,960 in 1994. The nonfederal funding for 1995 is projected to be \$509,000 for state appropriations.

This research is being conducted at Kansas State University by the Wheat Genetics Resource Center. This project was projected to run for 10 years and therefore, would continue through fiscal year 1998.

WOOD UTILIZATION RESEARCH

The program underwent a vigorous review and has been redefined to include: meeting environmental objectives in timber harvesting and forest products manufacture; extending the timber resource through research, including management; and exploiting pesticides developed from forest trees. In addition, three new universities have been added to the program. They are emphasizing machining, managing small forest products industries wood technology, and developing new products from wood and recycled materials. This program is national in scope. Centers are established around species types, i.e. western conifers, southern pines, Lake States hardwoods, and northeastern forests. Two locations are working in specific subdisciplines, i.e. machining of wood and incubator technology transfer.

The original goals have been reviewed and changed. Briefly the emphases are more aligned toward environment stewardship, resource extension, technology transfer, and scientist education. Research that extends the resource provides avenues for decreased impact on the ecosystem. For example, Oregon State researchers estimate that each increase in the efficiency in plywood production in Oregon mills translates into 8,000 trees 80 feet tall and 20 inches in diameter at four and one half feet. Over the life of this grant, plywood mills have increased their efficiency over 10 percent. That equates to 80,000 trees annually. In addition, the consumer benefits from a lower cost in materials and production. Installation of these procedures has been documented to save \$200,000 in one mill and \$300,000 in a second. Hand held calculator programs have resulted in savings of nearly \$1,000,000 to woodsmen. These workers do not have the funds to invest in research, but they benefit from this program. Reduction in costs related to cleanup in superfund sites are estimated as tenfold. Water quality has improved due to the introduction of bacteria that consume polychlorinated phenols in contaminated water sources. Laser cutting of wood may revolutionize the cut-up technology for furniture plants. Savings in using evolving laser systems have been verified. System analysis of sawmill operations has allowed managers to improve the efficiencies of operation. Examinations of trusses in wooden bridges may provide local highway agencies to replace the thousands of hazardous bridges at cost far below concrete or steel bridges on secondary highways. These are but a few of the examples of continuing research in wood utilization. Due to the fragmentation of the industry, the pressures on the resource, and the benefits to the consumer, Federal funding is a

major part in the process. Each of these units has an advisory committee that establishes priorities and peer reviews research proposals.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, \$3,000,000; fiscal years 1986 through 1989, \$2,852,000 per year; fiscal year 1990, \$2,816,000; fiscal years 1991 and 1992, \$2,852,000 per year; fiscal year 1993, \$4,153,000; fiscal year 1994, \$4,176,000; and fiscal year 1995, \$3,758,000. A total of \$35,015,000 has been appropriated.

Mississippi State University non-federal funds were: State appropriations \$2,498,800, \$2,178,725, \$2,353,225, and \$3,991,309 for 1991, 1992, 1993, and 1994 respectively. In addition, industrial funds averaged \$750,000 for those four years in support of the Mississippi Forest Products Laboratory. Oregon State University state appropriations were: \$1,337,962, \$1,394,304, \$1,256,750, and \$1,252,750 for 1991, 1992, 1993, and 1994 respectively. Estimated non-public support averages \$500,000 per year. Michigan State University non-federal contributions for 1994 totaled \$910,481. We do not have 1995 estimates due to the differences in fiscal years. Three new locations were added in 1994: University of Minnesota - Duluth non-federal match was \$590,000; North Carolina State University, \$126,000; and the University of Maine, \$600,000. The Federal funds are leveraged two to one.

There are six locations. The initial three - Oregon State University, Mississippi State University, and Michigan State University were joined by the University of Minnesota - Duluth, North Carolina State University, and the University of Maine in fiscal year 1994.

The research needs are continuously evolving. Four locations have scientists compete for funding. These institutions provide the regions with a spectrum of research missions and, therefore, the program continually changes as new products, processes, environmental concerns, and consumer needs change. Each program has a priority list of needs.

WOOL RESEARCH

The overall goals for this research are the development of objective measures of wool, mohair, cashmere and other animal fibers to increase profitability of the sheep and Angora goat industries. Specific objectives include: develop and evaluate measurement techniques for rapid objective evaluation of wool.

mohair, cashmere and other animal fibers; use objective measurements to increase fiber production, quality and income to producers; and investigate commercially acceptable methods of producing high yields of wool grease containing low levels of pesticides. Collaboration exists among researchers in Texas, Wyoming and Montana associated with this grant and other Federal, university and industry scientists on a wide basis to assure responsiveness to the needs of those involved in wool and mohair production, marketing and processing.

The overall goals for this research to develop objective measures of wool, mohair, cashmere and other animal fibers to increase profitability of the sheep and Angora goat industries remains the primary emphasis of the research. In fiscal year 1994 the program was expanded to include an objective to investigate pesticide levels in the lanolin in wool. Computer software programs for the automatic image analysis system are being evaluated and improved for the purpose of measuring the average diameter and distribution of animal fibers. Software is also being written to permit rapid, accurate measurement of other fiber properties. Near infra red reflectance analysis was compared to standard practices for yield measurement of mohair.

Continued progress is being made to improve the quantity and quality of fibers produced from sheep and goats. Correlation studies are being made to compare measurements made with the image analyzer, a laser scan instrument, to those measured by microprojection. Numerous scientific and technical papers were published during the past year.

Grants have been awarded from appropriated funds in the amount of \$150,000 for fiscal years 1984-1985; \$142,000 per year for fiscal years 1986-1989; \$144,000 for fiscal year 1990; \$198,000 for fiscal year 1991; and \$250,000 per year for fiscal years 1992-1993; fiscal year 1994, \$235,000; and fiscal year 1995, \$212,000. A total of \$2,157,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$150,913 state appropriations, \$11,800 product sales, \$5,817 industry, and \$3,556 miscellaneous in 1991; \$111,394 state appropriations, \$25,451 product sales, \$41,442 industry, and \$3,068 miscellaneous in 1992; and \$152,699 state appropriations, \$39,443 product sales, \$40,804 industry and \$3,556 miscellaneous in 1993.

The research is in progress at the Texas Agricultural Experiment Station, the University of Wyoming and Montana State

University. It is anticipated that five years will be required to complete the current research.

AGRICULTURAL DEVELOPMENT IN THE AMERICAN PACIFIC

The Agricultural Development in the American Pacific --ADAP-- project is a primary means for Land Grant research, extension, and instruction programs of the five participating institutions -- American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam and University of Hawaii-- to collaborate and cooperate to enhance their impact on agriculture and communities. ADAP is a mechanism to address common regional client-based issues while maintaining cultural, rural, economic and environmental integrity. With maturation of the ADAP community, the program chair is anticipated to move in 1995 from the University of Hawaii to one of the other five institutions. In addition, each ADAP institution is considering administrative management of project funds directly with CSREES rather than have the University of Hawaii continue to serve this role. The five participating institutions are geographically very dispersed yet facing many similar issues which can best be served through extensive networking and communication. ADAP facilitates communication and seeks to raise levels of academic achievement and improve the quality of education.

ADAP's original goals are embodied in the 1993 strategic plan, namely to develop human resources within the institutions, to more effectively manage agricultural programs within and among the institutions, and to focus resources available on ADAP mission needs. In 1994, CSREES expressed the need for fewer, better funded projects which more directly service the communities of the participating institutions. Review and selection of projects for funding under the fiscal 1995 appropriation should reflect CSREES' request for change.

This work has been underway for seven years with an annual appropriation of \$650,000 to Extension Service. In fiscal year 1994, an appropriation of \$608,000 was made to CSREES to continue the ADAP program. The fiscal year 1995 appropriation is \$544,000 for a total of \$1,152,000.

Non-federal funds are not provided. Unspecified in-kind support, such as facilities, equipment and administrative support, are provided by each institution and, in some specific projects, by non-ADAP collaborating institutions.

This work is being carried out by American Samoa Community College, College of Micronesia, Northern Marianas College, University of Guam, and the University of Hawaii. ADAP institutions anticipate that funding will be needed for a number of years in order to build a sustaining capability.

AMERICAN INDIAN INITIATIVE OF THE ARID LANDS DEVELOPMENT FUND

The proposed research activities of the Arid Lands Development Fund is to adapt existing irrigation technologies for use in the arid Southwest of the U.S. for agricultural production. The proposal would form a partnership with Hopi Indian tribal leaders and community participants on the tribal reservation to test alternative approaches with a sensitivity to economic, environmental, cultural and traditional values of the tribe.

Proposed research will take Israeli irrigation technology and test its application in the arid American southwest on the Hopi Indian Reservation. Internationally known irrigation specialists from Israel will work with tribal leaders in identifying test sites to develop irrigation methods and to evaluate through community programs the acceptability of irrigation technology by the Hopi culture. The technology is relevant to the arid southwest where large tracts of land could be made more productive if the Israeli technology can be adapted to the region.

The original goal of this research is to test the applicability of Israeli irrigation technology in the arid U.S. southwest. Israelis have developed technology that allows the use of saline water for the production of crops. The water quality of the arid U.S. southwest is similar to the saline water conditions of Israel and the research will seek to adapt these known irrigation technologies.

The work supported by this grant begins in Fiscal Year 1995 and the appropriation for fiscal year 1995 is \$405,000.

The Arid Lands Development Fund is currently seeking complimentary funding from philanthropic foundations and other sources to round out its budget for the project. CSREES anticipates periodic updates from the Arid Lands Development Fund on their fund raising success. No progress in fund raising has been reported thus far.

Funds will be awarded to the Arid Lands Development Fund, an organization headquartered in Cleveland, Ohio. The research will be conducted on the Hopi Reservation in and around Second Mesa.

Arizona which is located in the northeast corner of the state. Specific sites are to be selected through community participation. The researchers anticipate that the pilot phase of this research project may be completed in fiscal year 1996.

ALTERNATIVE FUEL CHARACTERIZATION LABORATORY

The Alternative Fuels Characterization Laboratory provides results of the use of biomass-derived fuels. This is the only laboratory in the nation devoted to studying the use of fuels made from renewable feedstocks. The results of the research conducted here are national in scope. Development of fuels from renewable resources may reduce the dependency on foreign petroleum while providing cash crops for farmers. The goal continues to be determining the parameters and performance of fuels made from renewable agricultural resources. The researchers are productive, reports are timely, and requests for research are acted upon. Gasoline is a variable commodity. Continued monitoring, examination of formulations, and evaluation of performance provides the consumers with information regarding the efficiencies of the broad range of fuels. The validity of ethanol blends has been defined. The fungibility of fuel components is another important property, especially in the reformulated fuels that has been reported, continued work is in progress.

The work supported in part by this grant began in fiscal year 1991. The appropriations for fiscal years 1991 through 1993 were \$250,000 per year, \$235,000 in fiscal year 1994, and \$204,000 in fiscal year 1995. A total of \$1,189,000 has been appropriated.

At the University of North Dakota for fiscal year 1994, the salaries of faculty and technician's approximated \$80,000; fringe benefits are additional. Industry grants were \$60,000. No amounts are available for prior fiscal years.

The University of North Dakota, Grand Forks, is the site of the laboratory. The University researchers anticipate this work may be completed in fiscal year 1996.

CENTER FOR AGRICULTURE AND RURAL DEVELOPMENT

The research provides economic information on international trade in agriculture and analyses of the implications of trade policy alternatives on the agricultural sector of the United States and other countries. According to the proposal, trade negotiations and agreements are of national concern to policymakers, farmers, and agribusiness industries because of the implications for

maintaining or opening markets and establishing terms of trade and prices. Typical agreements are extremely complex, requiring analysis by specialists to determine outcomes and to provide useful information to those impacted by such agreements.

The goal is to assess and evaluate various proposals affecting agricultural trade, to provide analytical support to the Office of the U.S. Trade Representative, and to provide information to farmers and agribusiness firms on the competitive implications of such agreements.

An extensive number of theoretical studies and empirical and descriptive analyses of policy issues and technical problems pertaining to the Uruguay Round of negotiations have been completed and provided to the negotiators and agribusiness community. Studies include the development of international trade models and assessments of trade options for meat, dairy, feed and cereal grains, oilseeds, and other commodities; impacts of the agreement upon selected countries; and reforms needed for compliance. Analyses include determination of the value and implications of export subsidies, import protection, and internal support.

This grant will support six projects focusing on the General Agreement on Tariffs and Trade monitoring and implementation problems; implications of the General Agreement on Tariffs and Trade for Eastern Europe, Baltic and the Newly Independent States; development of a model to assess the North American Free Trade Agreement and its linkages with the General Agreement on Tariffs and Trade; trade implications of U.S. food and development aid in developing countries; integration of China into world agricultural markets; and special projects as requested for the U.S. Trade Representative's office.

This research program was initiated in fiscal year 1989. Grants have been awarded from funds appropriated as follows: fiscal year 1989, \$750,000; fiscal years 1990 and 1991, \$741,000 per year; fiscal years 1992-1993, \$750,000 per year; fiscal year 1994, \$705,000; and fiscal year 1995, \$612,000. A total of \$5,049,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$111,210 State appropriations and \$175,616 miscellaneous for a total of \$286,826 in 1991; \$113,779 State appropriations and \$173,117 miscellaneous for a total of \$286,896 in 1992; \$120,138 State appropriations and \$164,707 miscellaneous for a total of \$284,845 in 1993; and \$161,673 State appropriations and \$32,000 miscellaneous for a total of \$193,673 in 1994. The

1995 preliminary non-federal allocation to this project is \$139,641 State appropriations.

The research program is carried out by the Center for Agriculture and Rural Development at Iowa State University. The university researchers anticipate that the work should be completed in 1998 with analyses of the final agreement of the Uruguay Round and related trade agreements and dissemination of these results.

CENTER FOR NORTH AMERICAN STUDIES, TEXAS

The purpose of this grant is to develop institutional linkages with programs in Mexico and Canada to share data and faculty, conduct research to identify trade opportunities and marketing problems, conduct policy analysis, and develop a broad range of training programs to prepare agricultural and agribusiness firms for international marketing opportunities. The recently adopted North American Free Trade Agreement raises a number of international and national issues about trade development needs and potential impacts among the three countries and alternative measures needed to assess and evaluate these issues. Research and training are needed to provide information on measures to expand U.S. exports and resolve potential social, economic, and environmental conflicts.

The goal is to promote strong agricultural ties among the three North American countries, ensure the continued competitiveness of U.S. agriculture, and foster greater cooperation among the three countries in resolving critical agricultural issues of common interest. The researchers have developed a comprehensive long-range plan of work and proceeded with implementation in four areas. Linkages have been developed with universities, data bases are being developed and disseminated, research is underway on Mexican-U.S. dairy trade and impacts of increased trade on environmental conditions, and training programs and materials are being developed and shared.

Work supported by this grant began in fiscal year 1994, and the appropriation for fiscal year 1994 was \$94,000 and \$81,000 for fiscal year 1995. A total of \$175,000 has been appropriated.

The non-federal funds and sources provided for this grant are as follows: \$39,000 State appropriations in fiscal year 1994, and \$54,000 State appropriations in fiscal year 1995.

The research program is being carried out at Texas A&M University in collaboration with Louisiana State University, and

other public universities in Texas. The program of work currently planned may be completed by 1999.

GEOGRAPHIC INFORMATION SYSTEM

This program is designed to transfer for evolving technology to state and local governments. This technology is new enough and sufficiently complicated that most of the people familiar enough with it to serve as effective transfer agents are researchers. The current program is being carried out by a non-profit corporation whose directors and participants are the sub-contractors who are carrying out the program. These sub-contractors range over the spectrum of sizes with four academic institutions, one regional development authority, and one independent entity working on problems of the Chesapeake Bay. This unique institutional arrangement has helped the program fill a unique role in linking some of the otherwise balkanized efforts of agencies and academic institutions. The program has concentrated on establishing regional centers for the transfer of this technology, identifying local needs to be met, assessing the availability of existing National or regional information, developing strategies for information acquisition in situations where such information did not exist, and initial training for local governments. These stages are largely past and current efforts involve a greater effort at technology transfer.

Much progress has been made in developing computer based information systems. This work is needed to transfer this technology to state and local governments whose limited training budgets and sometimes isolated location make it difficult to use the latest technology. The technology in this instance is useful in improving the management of our natural resources. While concentrating on issues related to agriculture, the independent, non-profit nature of the National Center for Resource Innovations facilitates linkages across disciplinary and institutional barriers and makes it possible to more effectively use work begun at the Federal level at the state and local government level. Perhaps the most difficult task facing this project is how to maintain the vitality associated with its start-up and how to involve additional states without abandoning totally all previous work.

The original goal of this work was to serve as a pilot project for the transfer of geographic information systems technology to local governments as related to natural resources. The work done in this program thus far has seen significant planning work done in South Georgia with some assistance given to local tax assessment and parcel identification. The Chesapeake

project has linked seven state conservation entities in an effort to better model activities in the watershed and thereby prevent pollution of one of our richest national natural resources. The Arkansas project has developed training methods that have served to educate county people with regard to the technology of geographic information systems and geographic positioning systems. The work at the University of Wisconsin has continued to be path breaking in seeking to relate changes in the decision-making process to the availability to graphically depict the situation and dynamics of a changing natural resource. The work in North Dakota has been moving forward an effort to have real time weather information geographically referenced. And, in the smallest of the efforts under this program, the efforts at Central Washington have provided training for a number of State personnel on how to utilize geographic information systems in implementing the State's growth management strategy.

The fiscal year 1994 grant supports work under this program through May 1995. The proposal for work in 1995 has been received and reviewed. It is anticipated that when awarded this grant will support work through May 1996.

Grants have been awarded from funds appropriated as follows: fiscal year 1990, \$494,000; fiscal year 1991, \$747,000; fiscal years 1992 and 1993, \$1,000,000 per year; fiscal year 1994, \$1,011,000; and fiscal year 1995, \$877,000. A total of \$5,129,000 has been appropriated.

For fiscal year 1990 through fiscal year 1993 the work in this program had \$1,819,856 non-federal support. In fiscal year 1990 non-federal support was \$714,940 consisting of equipment, data bases, and other miscellaneous contributions from foundations, city, and state governments. In fiscal year 1991 non-federal support was \$25,000 from county government. In fiscal year 1992 non-federal support was \$366,016 from county government, computer companies, and state governments consisting of equipment, software, facilities, and miscellaneous support. In fiscal year 1993, non-Federal support was \$713,900 consisting of financial and miscellaneous support from foundations, county and state governments. In fiscal year 1994, the non-Federal support was not reported for all sites. However, for those reporting, the total was \$691,000.

The National Center for Resource Innovation Chesapeake Bay center is located in Rosslyn, Virginia. This group is working under a memorandum of understanding with the several states most directly impacting the water quality of the Bay. Other work is

being accomplished in other regional centers. The southeastern center, in Valdosta, Georgia, in affiliation with the South Georgia Regional Development Center, has developed a comprehensive plan for the City of Adel which is being used as a model for other efforts within the Region. The southwestern center, in Fayetteville, Arkansas has provided training for local government personnel and serves the group as a center for expertise in using the Federally developed public domain GRASS system. Central Washington University focuses on training in the ARC/INFO system for use in state planning. The north central center in Grand Forks, North Dakota, in affiliation with the University of North Dakota, focuses on relating real time weather data to other spatial attributes. In addition, this center has sought to implement ideas developed in other centers in the distance learning concept. The University of Wisconsin-Madison, functioning as the Great Lakes center, continues a long history of involvement in the application of this technology at the local level with strong focus on soils/land-use and the social aspects of the integration of a new technology.

At the current rate of funding, the researchers anticipate that this technology will be generally available and accessible in three to four years.

GULF COAST SHRIMP AQUACULTURE

Work under this program has addressed important research needs necessary for the development of a U.S. marine shrimp farming industry. Studies have been conducted on growout intensification, prevention and detection of diseases, seed production, and the development of specific pathogen free stocks. Performance trials in various production systems have been conducted. Maturation and reproductive performance in seed production systems has reached commercial feasibility. Protocols for viral detection have been improved and have led to the development of specific pathogen free stocks of commercial importance. In fiscal year 1995, emphasis will be placed on the industry seed supply, disease control and animal health assurance, and environmental quality.

There is potential to enhance domestic production of marine shrimp through aquaculture in order to reduce the annual trade deficit in marine shrimp, which is approximately \$2 billion. Research could improve the supply of high quality seed, improve shrimp health management, and enhance production efficiency in shrimp culture systems. The U.S. has the opportunity to become a major exporter of shrimp seed and broodstock, disease control technologies and products and services.

The original goal was to increase domestic production of marine shrimp through aquaculture. Studies have been conducted on growout intensification, prevention and detection of diseases, seed production, and the development of specific pathogen free stocks. Maturation and reproductive performance in seed production systems are now commercially feasible. Protocols for viral detection have been improved and have led to the development of specific pathogen free stocks. These specific pathogen free stocks have been evaluated in most of the commercial shrimp farms in the U.S. and have demonstrated consistently superior performance over previous stocks leading to a more profitable industry. The development of these stocks has also established the U.S. as the primary source of specific pathogen free shrimp seed world wide. A selective breeding program has been initiated for commercially important traits such as growth rate and disease resistance.

Grants have been awarded from funds appropriated as follows: fiscal year 1985, \$1,050,000; fiscal year 1986, \$1,236,000; fiscal year 1987, \$2,026,000; fiscal year 1988, \$2,236,000; fiscal year 1989, \$2,736,000; fiscal year 1990, \$3,195,000; fiscal year 1991, \$3,365,000; and fiscal years 1992-1993, \$3,500,000 per year; fiscal year 1994, \$3,290,000; and fiscal year 1995, \$2,852,000. A total of \$28,986,000 has been appropriated.

The U.S. Marine Shrimp Farming Consortium estimates that non-federal funding for this program approaches 50 percent on the Federal funding for fiscal years 1991-1994. The source of non-federal funding is primarily from state and miscellaneous sources. In-kind contributions from the industry were not included in this estimate, but are substantial as the program is dependent upon industry cooperation to carry out large scale commercial trials.

The work is being carried out through grants awarded to the Oceanic Institute, Hawaii and the Gulf Coast Research Laboratory in Mississippi. In addition, research is conducted through subcontracts at the University of Southern Mississippi, Tufts University, the Waddell Mariculture Center in South Carolina, the Texas Agricultural Experiment Station, and the University of Arizona. The researchers anticipate that the specific research outlined in the current proposal will be completed in fiscal year 1996.

HERD MANAGEMENT, TENNESSEE

The research plan was developed in 1991. Research to date has focused on the comparison of two systems of herd management that evaluate the effect of preweaning protocols on growth

performance and carcass quality of genetically lean beef. The breeding study utilizes selected beef sire breeds to produce carcasses at slaughter that have an increased percentage of lean and reduced percentage of fat. The purpose of this research is to produce a high quality, low fat beef product that meets the demands of an increasingly health conscious public and utilize feeds available in the Southern region in economical systems for beef producers. Efforts are underway to study the nutritional properties and health aspects of lean beef.

The goal is to use selective breeding and management of cattle to produce lean meat. Preliminary data suggest that genetically lean animals exhibit faster growth performance and reach market weight faster. The carcasses also have a greater proportion of muscle to bone and muscle to fat compared to the control groups.

The work supported by this grant began in fiscal year 1991 and the appropriation for fiscal year 1991 was \$375,000. For fiscal years 1992 and 1993 the appropriation was \$475,000 per year; for fiscal year 1994 \$544,000; and 500,000 for fiscal year 1995. A total of \$2,369,000 has been appropriated.

The non-federal funds and sources provided were as follows: \$2,675 State appropriations, \$1,862 product sales and \$2,000 miscellaneous in 1991; \$2,675 state appropriations, \$22,697 product sales and \$2,000 miscellaneous in 1992; and \$2,782 State appropriations, \$56,803 product sales and \$2,000 miscellaneous in 1993. Similar data for fiscal year 1994 were not available at this time.

Research is being conducted by scientists at Tennessee State University, and other locations in cooperation with Genetic Research and Management Company in Tennessee. The investigators anticipate that this research will be completed in fiscal year 1997.

NATIONAL POTATO TRADE AND TARIFF ASSOCIATION, COLORADO

The purpose of this grant is to support research and analysis by the National Potato Trade and Tariff Association on trade and tariff issues affecting the exportation of U.S. produced potatoes. There is a national need to identify use of trade barriers and tariffs affecting the export of U.S. produced potatoes, make an assessment of the implications, and work with various groups including government officials to reduce or remove the barriers.

The research will begin in fiscal year 1995. The fiscal year 1995 appropriation is \$87,000. The association has not made a determination of the amount of non-federal funding that will be dedicated to this project.

The work will be administered from the headquarters of the National Potato Trade and Tariff Association in Denver, Colorado. The grant recipient views this research as a continuing effort.

MISSISSIPPI VALLEY STATE UNIVERSITY

Funds were used to strengthen academic programs, including accreditation and reaccreditation. Eight academic programs have been accredited. Academic offerings have been broadened consistent with the needs of students from the Mississippi Delta. Curriculum additions have had a positive impact on student enrollment. Courses continue to be modified to reflect the needs of graduates as well as employers in the Mississippi Delta, with particular emphasis on those areas that employers have the greatest need. The funds continue to provide enhancements related to other program and administrative support areas that positively impact program delivery and administration at Mississippi Valley State University.

The original goal was to provide funding to alleviate the fiscal shortfalls of the university so that sound academic programs could be developed and maintained. This funding has strengthened the fiscal and academic areas of the university. The budget deficit has been eliminated and the general administration of fiscal and academic programs greatly improved. Increased quality of instruction and programs has benefitted students. This is reflected in the higher graduation rate, increased student enrollment, and improved community relationship.

This program was initiated in fiscal year 1987. Grants have been awarded from funds appropriated as follows: fiscal year 1987, \$750,000; fiscal years 1988 and 1989, \$625,000 per year; fiscal year 1990, \$617,000; fiscal year 1991, \$642,000; fiscal years 1992-1993, \$668,000 per year; fiscal year 1994, \$593,000; and fiscal year 1995, \$544,000. A total of \$5,732,000 was appropriated.

Mississippi Valley State University received State and private funding during the period of this grant. The State figures provided here are for enhancement funds gained above the University's standard formula generated funds. The sources and amounts are as listed:

SOURCE

<u>Fiscal Year</u>	<u>State</u>	<u>Private</u>	<u>Total</u>
1987	\$0	\$168,640	\$168,640
1988	0	186,036	186,036
1989	68,658	190,258	258,916
1990	207,879	369,358	577,237
1991	333,263	337,700	670,963
1992	349,427	470,220	819,647
1993	35,750	358,680	394,430
1994	590,890	568,970	1,159,860

These funds are intended to strengthen programs at Mississippi Valley State University. The total program has been carried out on the campus at Itta Bena. The objectives of the current grant will be completed by September 30, 1995.

PM-10 STUDY, CALIFORNIA AND WASHINGTON

The two programs are studying different phases of the larger study. The University of California - Davis researchers are working with agricultural production examining the process and the development of PM-10 materials. They are also developing equipment to accurately measure PM-10 and fractions. The Washington State researchers are developing a portable wind tunnel to define variables associated with the generation of fugitive dust. Their work will aid in expanding the utility of the wind erosion model. This research certainly has local impact, but PM-10 generation and mitigation is extremely important in the semi-arid West and is important nationwide at every agricultural and forestry operation from a health issue and, to a limited extent, a visibility issue.

This research was initiated to define sources and sinks of airborne particulate matter. The sources range from unpaved roads to harvesting agricultural products. The program has been underway about six months. Initial studies have been conducted in almond and walnut harvests. The wind tunnel has been designed and preliminary tests conducted.

The work supported by this grant began in March, 1994. The appropriation for fiscal year 1994 was \$940,000; and for fiscal year 1995, \$815,000. A total of \$1,755,000 has been appropriated.

The program is matched by State funds in the form of salaries, benefits, and operating costs.

The University of California - Davis and the Washington State University are the participating institutions. This is a long-term study. There are so many facets to the research. The initial emphases are on developing sound scientific measures to monitor, model, and mitigate particulates.

VOCATIONAL AQUACULTURE EDUCATION

In 1990, Congress, through USDA's Office of Higher Education Programs, began funding a multi-year project to: develop curricula and support materials, field test content, and conduct national teacher training on the materials. In 1991, utilizing the new instructional materials, schools in Texas, Iowa, Indiana, South Carolina, Pennsylvania and Washington were selected to field test the curriculum. They completed the field tests in January 1992. In August 1992, teacher teams from all 50 states received training in Raleigh, North Carolina on how to teach the material. Additionally, a recirculating systems manual was developed and instructors explored a model classroom recirculating system designed and built in cooperation with North Carolina State University. Some 2,000 copies of the 1,100 page, five volume core curriculum and support materials were sent to all states in the fall of 1992. States replicated the training program at their own teacher workshops in 1993. In addition, grant funds were used to develop and test 16 species-specific curriculum modules, complete and test the recirculating systems manual, support additional regional in-service training, design outreach programs to culturally diverse audiences, and begin development of units on biotechnology and sustainable agriculture as they relate to aquaculture. In September 1993, in-service training for the 1890 Land-Grant Colleges and Universities was held at North Carolina A&T University in Greensboro, North Carolina. The 1994 grant funds are supporting education research through December 1996 to allow for completion of writing and testing of the species-specific curricula and for initial layout and design of teaching materials.

The 1994 grant will be used to print and distribute the species-specific materials, develop a national in-service training center for secondary aquaculture education, support regional learning centers and other outreach programs for multicultural audiences and inner-city schools, complete the sustainable agriculture and biotechnology units, produce and distribute consumer information on aquaculture, and conduct an evaluation of the vocational aquaculture curriculum project.

Prior to this project, there were very few curriculum or teaching materials on aquaculture available for local secondary schools and teachers were not prepared to teach this subject.

Funds were originally appropriated by Congress to determine if curriculum materials existed and to what extent; what additional materials were needed; and if it was possible to provide these materials, train teachers, and conduct a quality aquaculture education program in the secondary and postsecondary schools. We have fully met and far exceeded these goals. To date, a new curriculum has been developed and tested, instructional materials have been distributed to all 50 states, teacher teams from all states have received training at a national workshop and additional in-service training has been provided by the states. Results from the six test sites report a 50 to 400 percent increase in students applying to study aquaculture and the integration of math and science into the curriculum with the full cooperation of teachers in other disciplines.

A total of \$2,624,000 has been appropriated for this program -- \$247,000 in fiscal year 1990, \$500,000 per year in fiscal years 1991 through 1993, \$470,000 in fiscal year 1994, and \$407,000 in fiscal year 1995.

The project has been very successful in generating support beyond the Federal investment. We know that two of the test site schools have invested over \$3 million of their own money in the project. Complete information from the other sites is not currently available but will be included in the project evaluation conducted as part of the 1994 fiscal year grant activities.

The work is being coordinated by The National Council for Agricultural Education headquartered in Alexandria, Virginia. The six test site schools are located in Texas, Iowa, Indiana, South Carolina, Pennsylvania and Washington. Other work has been conducted at North Carolina State University in Raleigh, North Carolina and at North Carolina Agricultural & Technical State University in Greensboro, North Carolina. The curriculum is being disseminated in all 50 states and U.S. Territories in the Caribbean and the Pacific and the states are conducting their own additional in-service training. The principle investigators have indicated that they may request one additional year of funding to enable them to update the curriculum modules and expand the dissemination process.

WATER QUALITY, ILLINOIS

The Illinois Groundwater Consortium grew out of a fiscal year 1990 appropriation of \$500,000 to Southern Illinois University at Carbondale to focus on the short- and long-term effects of agricultural chemical contamination on the environment, the groundwater, and ultimately, human health and welfare. As a result of this appropriation, the University joined forces with the Illinois State Geological Survey, Illinois State Water Survey, University of Illinois Cooperative Extension Service, and the University of Illinois Agricultural Experiment Station to create the Illinois Groundwater Consortium. The Consortium's primary mission, then and now, is to effectively work toward providing a scientifically-valid basis upon which meaningful agricultural chemical management and regulatory decisions can be based. It is important not to diminish the nation's agricultural productivity nor its cost effectiveness. Therefore, the Consortium has worked to address the concerns of the agricultural and agrichemical industries as well as the valid concerns of the agencies charged with protection of environmental quality. Example topics currently under study include herbicide movement/tillage practices, protection of water quality in watersheds, modeling transport of agricultural chemicals, grass buffer strips for pollution reduction, and policy alternatives to reduce agricultural chemicals in public water supplies.

Our understanding of the interaction of pesticides with soil and groundwater is inadequate. The goal of this research is to determine the short-term and long-term effects of chemicals applied to the soil upon groundwater quality. Information is needed at a local, regional and national level on occurrence, transport and fate of agriculture chemicals in various hydrogeological settings. The recent Midwest flooding of the Mississippi, Missouri, and Illinois Rivers, and their tributaries, created devastating effects on farm lands which have major implications for agricultural practices and water quality in the region. This natural catastrophe has resulted in a need for further studies examining the impact of the flooding on surface/groundwater on agricultural land in the Midwest. The Great Flood of 1993 is not limited to Illinois, but affects seven other states in the Midwest. Thus, the Illinois Groundwater Consortium views its research program as having broad application throughout the Midwest. The Consortium would like to be a leader in providing information to facilitate short-term and long-term systems studies of the effects of flooding on which to base policy management decisions. In view of significant needs for research in high priority national interest topics such as improved pest management systems, funds are not

proposed to continue this grant. The principal researcher believes this research to be of national, regional or local need.

The Illinois Groundwater Consortium was established to coordinate and support research on agricultural chemicals in Illinois groundwaters. The research team has accomplished an improved understanding of the fate and movement of agricultural chemicals under Illinois crop production conditions. A publication supported by the Consortium entitled, "Buried Treasure: 50 Ways Farmers Can Protect Their Groundwater," has received widespread acceptance and use for lay audiences.

The Illinois Groundwater Consortium has accomplished a major step toward coordination and exchange of information/research results relating to groundwaters in Illinois. The Groundwater Bulletin reports research results from the Consortium. The Bulletin reports on atrazine studies, nitrogen management, farming practices for more efficient chemical use, geological impacts and policy options to safeguard groundwaters.

The Consortium investigators took an active role in monitoring and investigating herbicide, pesticide and coliform impacts during and after the Mississippi River Flood of 1993. The research continues today on the long-term impacts of flooding and management of the affected areas. The findings from this study will be useful in restoring the flooded cropland to full productivity and in establishing a base upon which policy management decisions can be made.

Research grants have been awarded from funds appropriated as follows: fiscal year 1990, \$494,000; fiscal year 1991, \$600,000; fiscal years 1992-1993, \$750,000 per year; fiscal year 1994, \$666,000; and fiscal year 1995, \$460,000. A total of \$3,720,000 has been appropriated.

The non-federal funds and sources provided for this grant were as follows: \$255,891 state appropriations in 1991; \$447,237 state appropriations in 1992; \$644,054 state appropriations in 1993; and \$623,124 state appropriations in 1994.

The work is being carried out by the Illinois Groundwater Consortium and coordinated by the Carbondale campus of Southern Illinois University. The research is being conducted by staff at the University of Illinois, Southern Illinois University, the Illinois State Geological Survey and the Illinois Water Survey at locations across the State. The plans for fiscal year 1995 funding will be for research to be conducted through fiscal year 1997.

WATER QUALITY, NORTH DAKOTA

The overall objective of the research is to develop an understanding of the occurrence, transport and fate of agricultural chemicals found in representative field settings in the Northern Plains. The ultimate goal is to provide a scientifically valid strategy for management of chemicals in agricultural production.

Seven field sites have been instrumented in North Dakota, and data has been collected on soil, water, weather and plant observation. The results are being analyzed and manuscripts are being written to be published in journals, conference proceedings or other reports.

This research has cooperative projects with North Dakota State University at the Oakes site, the University of Waterloo, the Devils Lake Sioux Tribe and the Bureau of Reclamation.

This program will provide opportunities for education and training of undergraduate and graduate students in groundwater geology and agricultural sciences.

The original goal of the research was to collect data on the fate and transport of chemicals used in agricultural production and to develop management strategies to minimize contamination of water sources. Seven field sites in North Dakota differing in agricultural practices, geology and hydrogeology have been instrumented to collect water quality data. Data collection and analyses are continuing on a regular basis at four primary sites. Based on initial results, the water transport flow mechanisms are variable at the site tested. Microbial data, collected at two sites, showed that the microbial activity is low at both sites.

In 1989, \$1.0 million was appropriated under the ground water research program. Beginning in 1990, funds have been earmarked under the Direct Federal Administration program. Work supported by this grant was initiated in fiscal year 1990 with an appropriation of \$987,000. Subsequent appropriations have been \$750,000 in fiscal year 1991, \$500,000 per year in fiscal years 1992-1993; \$470,000 in fiscal year 1994; and \$407,000 in fiscal year 1995. A total of \$4,614,000 has been appropriated for this water quality research program.

The Energy and Environmental Research Center at the University of North Dakota indicates that non-federal funds have not been provided for this grant.

Research is being conducted at the University of North Dakota through its Energy and Environmental Research Center. A portion of the pesticide research was sub-awarded to North Dakota State University. The Bureau of Reclamation and the University of Waterloo are cooperators. The current funded project supports research for three years through fiscal year 1998.

NEW CRITICAL ISSUES SPECIAL RESEARCH GRANT

Question: The fiscal year 1996 budget requests \$500,000 for a new critical issues special research grant. Why? Such funding is not currently available. Would this funding be requested if the Administration was not proposing to terminate funding provided for fiscal year 1995 for special research grants to address specific problems and needs?

Answer: This request represents a continuing effort by the Cooperative State Research, Education, and Extension Service -- CSREES-- to obtain funds which can be used on short notice to meet emerging new critical needs in animal and plant health. There are unexpected demands placed upon the national agricultural system as new issues arise that require immediate responses. Many of these demands are imposed on the system at mid-year or following the budget planning process when available resources have been committed. Further, many of these situations require quick response. There is a need to provide a process that is coordinated by CSREES to identify "areas of research competency and capacity" within U.S. universities, Federal laboratories and the private sector that can be quickly mobilized to respond efficiently and effectively to these pressing issues.

Examples of recent or current problems include: 1) *E. coli* 0157:H7 and food safety; 2) the outbreak of the sweet potato white fly; 3) potato late blight in Maine; 4) Africanized honey bee influx; and 5) the threat of contamination of water supplies with cryptosporidium organisms. In each of the examples above, resources are potentially available to respond to the issues; however, the formula grant programs currently managed by CSREES represent funds which are committed to supporting the base programs. These provide infrastructural support that can be leveraged and redirected in responding to crisis issues. The competitive grant programs depend on investigator initiated proposals and are not designed to provide the quick response needed to accomplish timely solutions. Traditional special grant appropriations are focused on known problems at the time of the appropriation process. This new grants/contract program will provide resources that will be focused over relatively short

periods of time --1-3 years-- to seek solutions rapidly to problems using existing disciplinary and multidisciplinary groups of scientists, whether in university, Federal or private laboratories.

This funding request is not a duplication of funding which might come from special research grants which are individually targeted to specific problems or needs known at the time of appropriations but rather represents an effort to have funds available to be used at the discretion of the food and fiber producing and consuming community for immediate responses to urgent issues, regardless of the area of the animal or plant industries that is being threatened.

WATER QUALITY

Question: An increase of \$1.743 million is requested for water quality under the Special Grants program. How does this research differ from water quality research conducted by the Agricultural Research Service? Is water quality research also funded through the National Research Initiative Competitive Grants Program? What is done to eliminate duplication between these research efforts?

Answer: The research conducted under the Special Grants Program in Water Quality within the Cooperative State Research, Education, and Extension Service awards funds competitively to all qualified scientists.

The Agricultural Research Service funds research by scientists at federal laboratories. The Special Grants Program and the National Research Initiative Program of the Cooperative State Research, Education, and Extension Service supports research by scientists with unique expertise in water quality at universities, state agricultural experiment stations, and public and private research organizations.

In fiscal year 1994, Congress started funding for a new quality research program entitled the "Water Resources Assessment and Protection Program" in the National Research Initiative Competitive Grants Program. The grants in this program focus on specific soil and water research components that impact water quality. The Special Grants Program, on the other hand, supports research to integrate these components into total agricultural management and production systems, and to evaluate the impacts of these integrated farming systems on water quality and pollution prevention at a larger watershed or regional scale.

The water quality research programs in the Cooperative State Research, Education, and Extension Service are open to all scientists nationwide on a competitive basis, including Agricultural Research Service scientists who are also eligible, and who successfully compete for these funds, generally, as collaborators with university of other research scientists.

Duplication has been successfully avoided among these water quality research programs by close and continuous coordination and joint planning by the program managers to assure that they do not overlap, but complement each other, for maximum impact in protecting agricultural water quality.

EQUITY IN EDUCATIONAL LAND-GRANT STATUS ACT OF 1994

Question: The Equity in Educational Land-Grant Status Act of 1994 designates 29 institutions of the American Indian Higher Education Consortium as land-grant colleges and authorizes funding for programs to allow tribal colleges to more effectively meet the agricultural educational needs of American Indians. Pursuant to this Act, the Consortium is seeking fiscal year 1996 appropriations of \$5 million for extension programs, \$1.7 million in Institution Capacity Building Grants, \$1.45 million for strengthening payments to the colleges, and \$4.6 million in endowment grants in lieu of land. I note that the fiscal year 1996 budget includes a request for \$4.6 million for the Native American Institution Endowment Fund. What additional funding is included in the FY 1996 budget for programs benefitting these "1994 institutions" as authorized by the Equity in Educational Land-Grant Status Act of 1994?

Answer: There is no additional funding in the fiscal year 1996 budget request as authorized by the Equity in Educational Land-Grant Status Act of 1994 other than the \$4.6 million for the first of five installments to the Native American Institution Endowment Fund. In addition to the request for the 1994 Land-Grant Colleges that is authorized by the Equity in Educational Land-Grant Status Act of 1994, the Department's request of \$1.7 million for Indian Reservation Extension Agents will benefit Native Americans by sustaining the placement of approximately 30 Extension agents on Indian reservations located in 20 States.

EXTENSION SERVICE ACTIVITIES

Question: The fiscal year 1996 request continues \$2.75 million in funding for rural health projects in Mississippi --\$2.25 million-- and Louisiana --\$500,000. Would you please give us a status report on each of these projects.

Answer: The Mississippi rural health projects funding supports the Mississippi Rural Health Corps --the Corps--, a combined cooperative endeavor by the Mississippi State Department of Health --MDH--, the Mississippi Cooperative Extension Service --MCES--, Mississippi's 15 public community colleges --the Colleges-- and the Mississippi Community College Foundation --the Foundation-- to eradicate inferior rural health service through education of Mississippians and the training and placement of health care professional in rural practice. The Corps will obligate those benefiting from education and training in the Corps to work in a rural area following graduation from nursing or allied health training at one of the colleges.

The Corps initiative recognizes that rural health care in Mississippi has deteriorated dramatically during the last 25 years. It is also acknowledged that without a highly organized, measurable, results-oriented effort by those who have a decisive role in health care, the negative trend in rural health care will continue.

The Corps is attacking the rural health problem by training annually a minimum of 400 additional RN's, LPN's and other health care professionals. To be more precise, the first year enrollment was 426. Each year additional enrollment occurs. The newly trained health care professionals will contract to practice in a rural setting following their training. Coalitions and partnerships across the state have been developed creating grass roots involvement in addressing health care issues. Informal educational programs focusing on high priority health issues are occurring throughout the state.

The first year of the Corps magnified the need for more nurses at the masters degree level to be employed as teaching faculty of the College. It also highlighted the need for distance learning in order to make the University Medical Center and other centralized facilities available to the nursing and allied health departments of the colleges and informal health education for Mississippians. In order to meet this need, Extension and the Foundation worked out a plan to redirect certain 1993 and 1994 funds to establish the Community Colleges Network --CCN--. This is a totally interactive system that networks the colleges, Extension and the Mississippi Medical Center utilizing --T-1-- telephone circuits and digital compressing technology developed in recent years. The CCN system has been installed and is operational to provide classes and informal health education for Mississippians for the 1994-95 year.

The project objectives are to:

1. Develop a culturally sensitive nursing intervention program to address the general health promotion and disease prevention health care requirements for the medically underserved rural and inner city populations;
2. Establish collaborative, interdisciplinary teams, using the expertise of School of Nursing faculty, Extension's Health Education Specialist, and other health related programs in the University and community to address the identified health promotion and disease prevention needs of the population being served;
3. Establish networking and collaborative relationships with other area nursing programs;
4. Increase the number of culturally sensitive health care providers who possess skills essential to effectively meeting the health care needs of the rural and intercity underserved; and
5. Design an outcome evaluation that examines the effectiveness and efficiency of the program in accomplishing the objectives.

The Louisiana State Office of Rural Health is providing \$226,000 for purchasing and equipping the project's mobile health unit.

INTEGRATED PEST MANAGEMENT

Question: The fiscal year 1996 request proposes a \$4.053 million increase for Integrated Pest Management efforts above the fiscal year 1995 funding level of \$10.947 million. Would you please describe your current activities in this area and why such a significant funding increase is needed.

Answer: Integrated pest management practices have proven to increase producer profitability and competitiveness and provide consumers with high quality, safe, and economical foods and other agricultural products. IPM combines biological, cultural, physical and chemical pest control tactics in a way that minimizes economic, health and environmental risks. IPM implementation on a national level is linked with reductions in pesticide use because it is based on an array of safe and economical pest management measures. Our goal is to develop and implement IPM systems on 75 percent of total crop acreage within the next seven years. To achieve this

goal, we have implemented a national IPM Initiative to provide cost effective solutions to today's agricultural production problems. Through IPM research and extension programs, U.S. agriculture will remain strong and globally competitive using production methods that are good for the environment.

Funds are provided to the Cooperative Extension System for IPM education programs that hasten the implementation of IPM strategies through pest management teams. This goal is accomplished both by helping to accelerate the technology transfer process and assisting the private sector in developing and improving delivery of pest management services. The fiscal year 1995 budget of \$10,947,000 is being spent as follows: \$7,592,400 --70 percent-- to 50 States and 6 Territories for general IPM programs; \$1,464,000 --13 percent-- to 11 states for cotton IPM programs; \$777,120 --7 percent-- for competitively awarded IPM special projects; \$768,000 --7 percent-- for potato late blight IPM research and extension; \$185,480 --2 percent-- for CSREES administration; and \$160,000 --1 percent-- for IPM education provided through the Pesticide Applicator Training Program.

Fiscal year 1995 funds allocated to the Cooperative Extension System directly supported the USDA IPM Initiative by placing emphasis on interdisciplinary and interorganizational team development at the state level under the leadership of State IPM coordinators. In addition, \$200,000 of the IPM special projects were used with an additional \$200,000 from regional competitive IPM research Special Grants to solicit competitive proposals on production region implementation programs.

The \$15,000,000 budget proposed for fiscal year 1996 will be spent on continued delivery of IPM education programs at the local level. Along with companion state and Federal research funds, the Extension budget for IPM will: 1) facilitate the development and implementation of IPM systems by a team of researchers, private consultants, producers, and other end-users; 2) implement a system of demonstrations and cooperative learning experiences; 3) conduct training programs aimed at increasing the knowledge-base of producers and expanding the number and caliber of pest and crop management professionals; and 4) develop new education approaches and information delivery technologies that support increased implementation of IPM systems. The goal of the IPM research and extension programs is to develop and implement new alternative approaches to pest problems. However, extension education programs target producers who currently are at different levels of IPM implementation --ranging from little or no use of IPM, to judicious use of pesticides, to intensive use of alternative IPM practices--.

AGRIABILITY

Question: The fiscal year 1996 budget proposes to eliminate \$2.0 million in funding for AgriAbility projects. Why? Would you please describe what activities are being supported by this funding.

Answer: The AgriAbility projects, focus on providing education and assistance to farmers with disabilities to accommodate their disabilities on the farm. We feel the State Extension Services can continue these projects through the use of non-Federal resources and Smith-Lever sections 3(b) and 3(c) formula funds. The activities supported by this funding in fiscal year 1995 include the national training project with Purdue University and the National Easter Seal Society and 18 state/regional projects in Colorado, Illinois, Indiana, Iowa, Kentucky, Minnesota, Missouri, Montana/Idaho, Nebraska, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, and Wisconsin.

The United States Department of Agriculture, Cooperative State Research, Education, and Extension Service, AgriAbility Project, in cooperation with the Cooperative Extension System and private nonprofit disability organizations provides on-farm assessments to farmers, farm workers and their families on how to accommodate disabilities on the farm, educates Extension agents, rural rehabilitation providers and other agriculture and health professionals on the technologies available that allow agricultural workers with disabilities to continue in agriculture; provides technical advice on agricultural equipment, home, and workplace modifications; and develops networks of volunteer and professional resources to accomplish modifications, provide peer counseling, early identification, and referral for assistance.

PESTICIDE APPLICATOR TRAINING

Question: The fiscal year 1996 budget proposes \$2.0 million in funding for Pesticide Applicator Training. This program was not funded for fiscal year 1995. Why is this considered to be a priority for funding?

Answer: Pesticide Applicator Training, or PAT, is an on-going Cooperative Extension program that reaches over one-half million private and commercial applicators each year. It is making a very positive impact on the protection of human health and the environment. PAT includes educational programs on pesticide alternatives, the use of bio pesticides, and environmental

stewardship. An additional benefit is that by all applicators being trained in the proper and safe use of pesticides, many agricultural pesticides have remained on the market instead of being canceled by EPA.

The request for \$2.0 million is to meet the increased demand for pesticide use technologies and educational programs for certification of restricted-use pesticide users, and for meeting requirements of other regulatory programs such as Worker Protection. The requested funds will also accelerate the development of educational materials on a regional and national basis. Presently, about 90 percent of the funding for the PAT program is provided by the State Cooperative Extension Services and 10 percent by EPA. The total cost of the program is over \$20 million. The \$2.0 million request will help assure that Extension is able to continue to provide the training required for all private and commercial applicators of restricted-use pesticides to become certified or recertified.

SUSTAINABLE AGRICULTURE

Question: How is the \$3.463 million currently provided for sustainable agriculture being spent? What additional activities will be funded with the \$1.5 million increase proposed for fiscal year 1996?

Answer: The bulk of fiscal year 1995 funds has been allocated to the four regions at approximately \$700 thousand per region, for disbursement based upon a competitive bid process. \$250,000 has been reserved for projects of national scope, with the proposals due in our office in June 1995. Administrative support receives \$138,520,000 and the balance pays the proportional share of 30 percent associated with matching EPA funds, associate director position, Sustainable Ag Network, program support for the Director's office and the SBIR. It is envisioned that fiscal year 1996 funds will be used to support previously submitted projects we think are worthwhile, but had to be denied due to lack of funding. These are holistic programs unwanted by-products into valuable fertilizers; research on the effects of sustainable research and education, and help link agriculture with urban communities. Additionally, some of these grants test and demonstrate the viability of alternative, value added enterprises --herbs in North Carolina, shiitake mushrooms in West Virginia, and farm raised shrimp in Kentucky, are a few examples--. Currently, we have 300 percent more requests for these programs than we have dollars.

SPECIAL PROJECTS

Question: The fiscal year 1996 budget proposes to eliminate \$7.370 million in special projects funded for fiscal year 1995. Would you please provide a description and status report on each of the projects currently being funded?

Answer: There are 17 special projects funded in fiscal year 1995. Funding is not specifically proposed for these programs, however, states that wish to continue this program may direct some of their formula funds to these activities. [The information follows:]

Technology Transfer Projects, in Oklahoma and Mississippi. The work plans involve the transfer of uncommercialized technologies from Federal laboratories and universities to rural businesses and communities. The programs are also involved with industrial extension efforts to transfer technology and provide training and business management to small, rural manufacturing firms.

The Mississippi Extension Service has demonstrated microcomputer technology and its applications to small town and rural county government; has introduced new technologies associated with value added processing and marketing for small businesses and industries through the Food and Fiber Center; has demonstrated features of national databases and federal laboratory technology; has extended cotton modeling programs developed by ARS; and has studied the feasibility of expanded food processing as a rural development initiative. Oklahoma State Extension Service has worked with rural small businesses and industry groups, including Rural Enterprises Inc., as well as local governments to identify priority technology needs and solve technical problems. These projects will be completed September 30, 1995.

Rural Development Project, in Nebraska. The Nebraska Cooperative Extension Service, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln, supports a small business information and technical assistance center which works with small scale, independently owned businesses within the State of Nebraska. The activities of the Center were focused primarily on rural retail operations until 1992. Since this date, the major thrust of educational efforts and technical assistance has been directed to value-added processing of agricultural products and small agribusiness firms. The current thrust in entrepreneurship and business development has successfully assisted the start up of 111 new businesses in the state during the past 2 years. At any given

time, 40 to 60 firms are being assisted. Current project work will be completed by September 30, 1995.

Rural Economic Development Project, in New Mexico. The REDTT Project is organized at the multi-county and county levels, with the Cooperative Extension Service (CES) of New Mexico State University providing significant leadership at both levels. Several training and planning meetings have been held in the eight-county region. This is a pilot project to create tourism training programs assisting in rural development through training, capacity building and the implementation of a comprehensive tourism marketing strategic plan. This work is being carried out in an eight-county area in Southeastern New Mexico which includes Chaves, DeBaca, Dona Ana, Eddy, Lea, Lincoln, Otero and Sierra counties. The work on the REDTT project should be completed March 31, 1995.

Rural Development, in Oklahoma. This is a technology-based economic development program that seeks to promote job growth, business development, and rural entrepreneurship through business assistance, technical assistance, business incubators, and new business financing. Commercial product fairs are held each year showcasing inventions by entrepreneurs from rural areas.

This project assists rural business in Southeast Oklahoma to get access to technology, financial and business management assistance. The work will be completed on September 30, 1995.

Pilot Technology Project, in Wisconsin. This project involves support for economic development in Wisconsin through direct assistance to manufacturers. The assistance takes the form of consultation to solve organizational, managerial, and technological problems through the application of improved technology. This program helps small and medium sized manufacturers in Wisconsin become more competitive, productive, and profitable. The project will be completed on September 30, 1995.

Chinch Bug/Russian Wheat Aphid, in Nebraska. This project is involved with the demonstration of management options available to Nebraska farmers for the chinch bug on sorghum and the Russian wheat aphid on wheat. This project addresses a local issue. The chinch bug is a serious but cyclical pest of sorghum and corn in the central Great Plains with traditional infestation hot-spots in the southeastern quarter of the state of Nebraska. The Russian wheat aphid is a recently introduced, destructive pest of wheat and barley in the western Great Plains that since 1988 has caused localized, but severe crops loss in the western one-third of the state of Nebraska. In terms of the Russian wheat aphid portion of

the project, we have demonstrated that resistant wheat varieties are useful in reducing losses due to this insect. We have also demonstrated the use of sampling and economic thresholds will benefit wheat growers in making management decision for the Russian wheat aphid. Additional demonstration/management work has accomplished with the wheat stem sawfly which was first found in western Nebraska in 1994. Studies have been initiated to learn more about the distribution of the High Plains virus in wheat and its association with the wheat curl mite which is the suspected vector. This work will be completed at the end of FY 95.

Cranberry Development, in Maine. The objective of this program is to provide growers who are beginning to establish cranberry bogs in Maine with the management skills necessary for a successful operation. The program is of local interest in the State of Maine, principally in the Washington and Hancock counties where new cranberry farms are located. The goal of this program is to educate growers and Extension faculty on cranberry culture. Significant progress toward this goal has been made through manuals, workshops, demonstrations, and other educational methods. The completion date for the project is September 30, 1996.

Rural Rehabilitation, in Georgia. The program has tested the feasibility of providing satellite-based adult literacy education, in association with vocational rehabilitation services, to handicapped adults in rural Georgia. The program has developed curriculum, tested and adapted technology, established student recruitment and retention strategies, expanded to Statewide coverage, and provided successful adult literacy education. The Georgia Tech Satellite Literacy Project is sponsored and operated by four organizations: Georgia Institute of Technology's Center for Rehabilitation Technology, The Center for Rehabilitation Technology (CRT), Inc., Literacy Action, Inc. and the Georgia Department of Technical and Adult Education. The program grantee is CRT, Inc., a private, not-for-profit business advisory board to the Center for Rehabilitation Technology, College of Architecture, Georgia Institute of Technology, from which the literacy instruction is provided. The 94 classes at 69 adult literacy classroom sites, dispersed throughout the State of Georgia and one site in Virginia, include 19 technical school, 15 adult learning centers, 19 high, middle or elementary schools, 4 universities, 5 libraries, and 2 rehabilitation centers. These projects are funded on an annual basis, and we usually estimate the completion date for the end of the fiscal year.

Income Enhancement, in Ohio. The Project helps farmers, food processors, and other local businesses explore and develop new or

expanded business opportunities. This program was designed to increase the potential income of farmers and other rural residents of Ohio. The original goal of the project was to evaluate income enhancement opportunities through adopting alternative agricultural enterprises, revitalizing the Toledo farmers' market, and expanding agribusiness companies. An Agricultural Business Enhancement Center was established. The Center provides in-depth educational programs and problem-solving assistance for existing and potential firms in the area. The Center assists firms in exploring new domestic and foreign market opportunities. It helped farmers and vendors organize the Farmers' Market Association of Toledo and now assists the Association in expanding the Toledo farmers' market. The Center relies on a local advisory committee for guidance and support. The current agreement with Ohio State University Extension provides funding through September 1995. It will probably be extended to September 1996 with the FY 1995 funding.

Beef Improvement, in Arkansas. The ABIP utilizes beef cattle farms to demonstrate cost-effective management practices. An ABIP Executive Committee provides overall direction for the program. Accomplishments to date include the establishment of demonstration farms, collection of benchmark data which included soil tests, production information, forage analyses and budgets and renovation of pastures to increase grazing capacity. Identification of mineral deficiencies in beef cattle have been detected and corrected through proper supplementation and ration balancing. Three of the farms averaged a 32 percent increase in pounds of beef sold per animal unit. Various management changes including parasite control and forage/pasture management have been instituted. Use of a cow-calf enterprise budget has helped the producers identify both efficient and inefficient management practices and take corrective actions. This project should be completed in four to six years.

Integrated Cow/Calf Management, in Iowa. CHIPS is an integrated cow-calf resource management program which originally targeted an eleven county area in Southeast Iowa. The project seeks to affect the area's rural economy by maximizing profitability to Southeast and Southcentral Iowa's cattle industry. During the past two years, this program has been expanded to over 20 counties. The overall goal of CHIPS is to affect the area's economy by returning and maintaining long-term profitability to the local cattle industry. To date, over 100 cooperators, involving over 9,400 cows, are enrolled and participating in the CHIPS programs. Three full-time technicians and one half-time specialist have conducted over 400 farm consultations to develop on-the-farm evaluations, make specific management recommendations, and assist with the

problem solving and decisionmaking process. CHIPS personnel have been involved in over 35 presentations, meetings, and workshops with over 1,000 people attending. It is anticipated that the CHIPS program will continue through 1996.

Delta Teachers Academy. The Delta Teachers Academy is conducted by the organization known as the National Faculty. It should be noted that our State Extension partners are not involved in this project. Initially funded in FY 1994, the Delta Teachers Academy project is providing approximately 375 teachers at 25 sites throughout the seven Lower Mississippi Delta States with development opportunities by teaming them with university scholars in on-site sessions and residential summer institutes. The subjects focused on during these training opportunities are English; geography, history, mathematics, and science. The goal of the project is to provide academic and professional development for elementary and secondary teachers in the seven-state region of the Lower Mississippi. The development opportunities and training for the 375 teachers anticipated for this project, will be conducted and completed during 1995.

Extension Specialist. in Arkansas. The Small Family Farm Management and Marketing Education Program provides farm financial management education and support materials necessary for development and maintenance of an effective financial management and marketing system for these operations. This program is targeted toward the special farm management and marketing problems of small farmers. The original goal of the project was to develop a small/family farm management, financial management and marketing education program at the South Central Family Farm Research Center at Booneville, Arkansas which was established in 1990. Since its inception, the project has extended farm financial management and marketing information to small family farmers in the target area. In 1994, specific emphasis was placed on alternative agricultural enterprises with widespread coverage throughout Arkansas and six other states. Production meetings and field days were conducted for producers with county Extension agent Computer software and documentation for farm record keeping involvement was made available to enhance farm profitability. ARS-USDA scientists cooperated in developing agro-forestry production systems for conditions in Arkansas, Louisiana and Missouri. The project supports work through the end of the current fiscal year.

Rural Center HIV/STD Prevention. in Indiana. This program created the Rural Center for the Study and Promotion of HIV/STD Prevention jointly between Indiana University, Bloomington, Indiana and Purdue University, West Lafayette, Indiana. The Center is headquartered

at Indiana University. The purposes of the Rural Center for the Study and Promotion of HIV/STD Prevention are (1) the development and evaluation of innovative educational material and approach designed to reduce HIV/STD risk behavior and incidence in rural areas and (2) the investigation of the social and behavioral barrier to HIV/STD prevention, the findings from which can be applied to the creation of prevention programming. Information has been compiled on the incidence and costs of rural HIV/STD and educational materials have been developed for field testing and evaluation. Since these projects are funded on an annual basis, we estimate the completion date for the end of the fiscal year.

Wood Biomass, in New York. The objective of this program is to extend, implement, and gain acceptance of wood biomass as a sustainable, renewable, and environmentally-friendly alternative farm product and energy resource. The State University of New York, SUNY has collaborated with DOE and the New York State Energy Research and Development Authority, in biomass research for several years. The program financed via the 103rd Congress is an extension of SUNY's ongoing research and will concentrate on "farm application of evolving technologies." The goal is to promote, via applied research and technology transfer: Wood biomass for energy as an alternative farm product, the wise stewardship of land resources, the use of domestic, renewable and sustainable energy, and provide opportunities for enhanced farm profitability. The completion date for this project is September 30, 1996.

Range Development, in New Mexico. The purpose of the "Range Livestock Interactions and Policy Development" project is to evaluate the importance of the rangeland resources to the economic structure of New Mexico counties and to the state as a whole. Data from state and county tax receipts and revenues is used to describe a detailed input/output model for each county and for the state. Subsequent public policy forums will be presented to convey the results of simulations and to explain political processes and effective citizen roles. This project is scheduled for completion in December 1995.

Agricultural Plastics, in Vermont. This project will develop and implement an agricultural plastics recycling and market demonstration, information, and education program for agricultural producers, agricultural retailers, and the consuming public. It is too early to report any program accomplishments. Since these projects are funded on an annual basis, we estimate the completion date for the end of the fiscal year.

1890'S AND TUSKEGEE UNIVERSITY

Question: The fiscal year 1996 budget indicates that the Administration is submitting a legislative proposal to repair, renovate and upgrade the existing research and education facilities at the 1890 land-grant institutions and Tuskegee University. The budget indicates that \$7.099 million in funding is requested for this purpose for fiscal year 1996. Has this legislative proposal been submitted to the Congress for consideration?

Answer: This legislative proposal has not been submitted to the Congress for consideration. We expect the administration's proposal to be sent forward very soon.

Question: Would you please identify the projects, by institution, for which funding is being requested for fiscal year 1996.

Answer: The agency can not at this time identify the projects, by institution, for which funding has been requested. The seventeen eligible institutions will prepare and submit proposals to the Cooperative State Research, Education, and Extension Service. The agency will evaluate the proposals using a competitive process. Guidelines and regulations will be distributed to the eligible institutions well in advance of the submission date. Congress will be informed when the awards are made to the institutions.

EXPANDED FOOD AND NUTRITION EDUCATION PROGRAM

Question: Would you please provide a description of the projects being funded through the Expanded Food and Nutrition Program --EFNEP--.

Answer: The Expanded Food and Nutrition Education Program --EFNEP-- currently operates in all the 50 States and in American Samoa, Guam, Micronesia, Northern Marianas, Puerto Rico, and the Virgin Islands. It is designed to assist limited resource audiences in acquiring the knowledge, skills, attitudes, and changed behavior necessary for nutritionally sound diets, and to contribute to their personal development and the improvement of the total family diet and nutritional well-being. EFNEP targets limited resource youth and families with young children.

EFNEP is delivered as a series of lessons, often over several months, by paraprofessionals and volunteers, many of whom are indigenous to the target population. Through an experiential

learning process, the adult program participants learn how to make good choices to improve the nutritional quality of the meals they serve their families. They increase their ability to select and buy food that meets their family's nutritional needs. They gain new skills in food production, preparation, storage, safety and sanitation, and they learn to better manage their food budgets and related resources such as Food Stamps. The hands-on, learn-by-doing approach allows the participants to gain the practical skills necessary to make positive behavior changes. Through EFNEP, participants learn self-worth --that they have something to offer their families and society--. Many program participants also make other significant lifestyle changes, such as going back to school and, in many cases, getting a job.

Many States specifically target pregnant teens and adults at risk of having babies with low birthweight. In 1994, 14 percent of EFNEP participants were pregnant women; 7 percent were under the age of 20. The education is aimed at helping to improve their prenatal and postpartum diets and, therefore, decrease the incidence of low birthweight babies and improve healthy births and infant nutrition. Low birthweight is strongly associated with infant deaths that occur in the neonatal period or first month of life. Inadequate nutrition among pregnant women may account for as much as 57 to 65 percent of babies born with low birthweight. The risk of having low birthweight babies is higher for women who are poor, black, younger than age 17, have little or no prenatal care, have inadequate diets, and gain less than 20 pounds during pregnancy. Nationwide, the percentage of babies born at low birthweight is increasing, from 6.7 percent in 1985 to 7.1 percent in 1991. Each year more than a quarter million infants are born at low birthweight --under 5 pounds 8 ounces--.

The delivery of EFNEP youth programs takes on various forms. EFNEP provides education at schools as an enrichment of the curriculum, in after school care programs, through 4-H EFNEP clubs, day camps, residential camps, community centers, neighborhood groups, and home gardening workshops. In addition to lessons on nutrition, food preparation and food safety, youth topics may also include fitness, avoidance of substance abuse, and other health related issues.

Question: Would you please provide a description of the projects being funded through the Nutrition Education initiative and how successful these projects have been in providing nutrition education to WIC participants. Which states are currently participating in the program?

Answer: The main goal of the Nutrition Education Initiative is to change the behavior and promote the nutritional well-being of the neediest WIC participants. The "neediest" WIC participants were defined as pregnant and postpartum women, infants and children in the WIC program who, as a result of factors such as geographic isolation, age, education, cultural background, language, circumstances of poverty, etc., lack the skills, knowledge and abilities to achieve a nutritious diet and a healthy lifestyle for themselves and their families and are likely to benefit from nutrition education provided by the Cooperative Extension System.

Through this initiative, we have strengthened the working relationship between Cooperative Extension Programs --such as EFNEP-- and the WIC program at the local, state and national levels, and have learned how to meet some of the special concerns of vulnerable audiences. New curricula, staff development and training materials, evaluation tools and marketing materials have been developed. After just one year of operation, we are finding that participants gain dietary knowledge, improve diets, increase breastfeeding rates, and improve meal planning and food preparation skills. A wide variety of educational techniques are being tested in this Initiative, including the use of interactive computer programs, mobile vans in remote rural areas, distance education, as well as the more traditional group and home visiting programs drawing on the EFNEP model.

In fiscal year 1994, we provided \$35,519 to each of the 56 State and Territory CES partners for a plan of work project in support of this initiative. In addition, we funded 18 competitively selected projects in 17 states. [A table identifying the state, project title, target population, educational intervention and stage of development at the end of the first year is provided].

Table 1 - Summary of Competitively-Awarded Projects in the ES/WIC Nutrition Education Initiative¹

State	Project Title	Target Population	Educational Intervention	Stage ²
CA	Culturally Relevant Nutrition Education for Vietnamese WIC-Eligible Women in California	Urban Vietnamese	Culturally-adapted EFNEP curriculum	Enr
CO	Using Abuelas to Teach Low-Income Hispanics and Migrant Farm Workers	Rural Hispanics	Distance learning for professionals, para-professionals; Culturally-adapted education delivered by grandmothers	Dev
FL	Addressing Nutrition Needs of Haitian Women, Pregnant and Breastfeeding	Haitian	New curriculum, materials for Haitians	Dev
GA	TAMS Integrated Nutrition and Health Program	Prenatal teens	After school classes, group activities, home visits	Out
GU	Early Experiences and Counseling for Effective Lactation (EXCEL)	Teen Pacific Islanders	School & WIC classes, intergenerational at-home teaching	Out
IA	Building a Peer Network of Nutrition and Breastfeeding Support for Rural Iowans	Rural	Peer counseling using WIC, EFNEP materials	Enr
MD	Infant Nutrition for Hispanic WIC Population: A Peer Education Model	Hispanic	Peer education focusing on infant feeding practices	Dev
MI	Michigan Extension/WIC Breastfeeding Support Nutrition Education Initiative	Rural, Urban	Breastfeeding peer support program, home visits, incentives	Out

State	Project Title	Target Population	Educational Intervention	Stage ²
MN	Nutrition...Making Life Healthy	Rural, Native American, teens, single moms	Group, individual sessions focusing on 5 videos and 1 food laboratory	Out
NV	Meeting the Nutrition Education Needs of Hispanics in Nevada	Hispanics	Culturally-adapted EFNEP curriculum ("Eating Right is Basic")	Enr
NY	Building Blocks for Toddlers	New mothers of toddlers	Individual, group sessions, parent mentoring	Enr
NC	NC Special Programs Expansion: Breast-feeding Support	Rural, Urban	Breastfeeding support-at home, in the hospital	Out
NC	NC Special Programs Expansion: Pregnant Adolescent	Prenatal teens	Teen nutrition education curriculum	Enr, Out
OK	Pregnant Teens Enrolled in the Chickasaw Nation WIC Program	Prenatal teens, Native Americans	Adapted curricula: "Have a Healthy Baby", "Eating Right is Basic"	Enr
RI	Southeast Asian Nutrition Education Initiative	Cambodian	Videos, breastfeeding support, home visits	Out
SC	Nutrition Education for Women (NEW)	Rural	Augmented services for "Healthy Start", "Caring for Tomorrow's Children" Programs	Out

State	Project Title	Target Population	Educational Intervention	Stage ²
TX	Madres y Niños Mejores (Better Mothers and Children) Project	Hispanics. African Americans	Compact disc-TV modules, group sessions	Dev. Enr
WA	Parents and Children Growing Together	Rural Hispanics. others	Classes, groups with critical thinking, problem solving methods	Enr

1 Based on information from Year 1 Final Reports submitted by the State projects.

2 Those projects developing materials essential to their operation are in a "development" phase (Dev). Those who have enrolled less than 1/2 their goal or have outcome data on a limited number are in the "enrollment" phase (Enr). Those projects which have outcome data on at least 1/4 of the intended goal are in the "outcome" phase (Out). These categorizations are somewhat arbitrary and are meant only to give a qualitative impression of the development stage.

Source: Economic Research Service, USDA

AGRICULTURAL TELECOMMUNICATIONS PROGRAM

Question: Would you please tell us how the Agricultural Telecommunications funds are being spent?

Answer: In FY 1994, Congress appropriated \$1.221 million for FY 1994 for Extension Service-USDA to support Agricultural Telecommunications projects. Funds have been made available to fund projects in three categories: Faculty and Staff Training, Program Delivery, Program Production-Innovative Programs. In response to the Federal Register Announcement of May, 18, 1994, we received 52 proposals.

A panel of experts from the National Science Foundation; Environmental Protection Agency; the U.S. Departments of Commerce, Education, and Defense; and several agencies within the Department of Agriculture reviewed these proposals. Funded proposals included:

FACULTY AND STAFF TRAINING

Alaska Cooperative Extension Telecommunications Training Program is a program designed to identify telecommunications technology delivery methods that could expand the Cooperative Extension educational outreach efforts, and develop a training model for use of this technology. This project represents a partnership of Alaska Cooperative Extension, native associations, local schools and other agencies, \$162,202.

The Iowa project, Establishing a Network Training Concept for Distance Education, involves Home Economists from six land-grant universities in the North Central Region who are developing a network training concept to improve the dissemination and sharing of academic instruction, extension programming, and research activities, \$60,000.

A second project funded to Iowa is designed to deliver a model program for staff and faculty training in agricultural distance learning at 13 land-grant universities. A Model Program for Staff and Faculty Training will focus on four key areas: technological issues, instructional design issues, understanding the distant learner, and evaluation, \$65,136.

PROGRAM DELIVERY

Puerto Rico's project, Teaching and Learning at a Distance, is a telecommunication network project designed to connect three

centers via interactive video and the Internet. Training for staff on the delivery of distance education programs is included. \$228,293.

The Hawaii project, Electronic Information System for Extension Delivery, is a system for electronic storage and transfer of agricultural and related information. This system will be established on an existing free state-owned system that is accessible by all citizens in the five Islands. \$45,510.

The project funded for California, Enhancing Trade Competitiveness Through Advanced Telecommunications, is a planning grant designed to explore creating access to trade and market information available from USDA Foreign Agricultural Service. \$24,999.

The funds awarded to Nebraska focused on the Agricultural Satellite Corporation program administration and Central operations of the 46-state consortium, including program marketing and transponder leasing for the consortium. \$214,159.

PROGRAM DEVELOPMENT/PRODUCTION-INNOVATIVE PROGRAMS

The upper-level university telecourse in marketing a food and fiber funded for New Mexico is designed to meet the needs of place-bound minority students. The project's title is Place-Bound Students--Interactive Learning Through Multiple Media. \$74,900.

PROGRAM DEVELOPMENT/PRODUCTION--TARGETED PROGRAMS

The University of Florida project targets the development of a training program for Extension staff and others on sustainable agriculture, including hand-on experiences, and multiple-media delivery. \$43,012.

The University of Idaho was awarded \$116,122 for the development of an interactive, experimental telecommunications methodology for empowering youth to take local action on waste management issues in local communities; the project title is Empowering Youth To Take Action: A Waste Management Education Program.

Texas A & M University project focused on an adaption of materials for delivery through multiple technologies, to be deployed in South Texas. The program would take advantage of hardware currently in place through other community and Federal

agencies. Outreach Effort to Colonias Residents Via Interactive Multimedia Programming was funded in the amount of \$70,200.

Utah State University project, International Agribusiness Marketing in a Transnational Environment, is a planning grant to explore alternative delivery methods for an International Agribusiness Marketing curriculum. \$18,787.

Question: Please give us a status report on AG*SAT.

Answer: The Agricultural Satellite Corporation, currently in process of name change to A Distance Education Consortium, continues in its function to support and enhance the teaching, research, and extension activities of the Land grant system, under the leadership of a Board of Directors and President. The Consortium received \$214,159 through a competitive process. The category for funding was in Program Delivery targeting network operations.

YOUTH-AT-RISK

Question: The Statement of Managers accompanying the conference agreement on the Fiscal Year 1995 Appropriations Act provides that \$500,000 of the total funding available for the Youth-at-Risk Program be allocated for the I-CARE Program in Marion County, Illinois. Would you please provide a brief report on this project.

Answer: The University of Illinois Cooperative Extension Service reports the I CARE Program was started because of a belief that in order for children to learn, the whole child must be cared for.

I CARE is a group of concerned citizens making an effort to assist children in the community who must deal with complex family and substance-abuse problems on a daily basis. Since 1983, I CARE has helped provide in-school counseling to many of Marion County's elementary and high school students. The I CARE program currently has three full-time and one part-time certified counselors. The \$50,000 YAR grant allows the hiring of two additional counselors, thus reducing the counselor/student ratio to more manageable levels.

Over the past eight years, I CARE's in-school counselors have dealt with hundreds of students in thousands of personal counseling sessions. They have also conducted many seminars and classes designed to educate raise the awareness of students.

parents and school personnel on such diverse topics as: sexual abuse recognition and avoidance, abstaining from pre-marital sex, parenting skills, alcohol & drug abuse, problem solving/decision making, communication skills, and relationship building.

BUILDINGS AND FACILITIES

Question: For each of the facilities funded under the Cooperative State Research Service Buildings and Facilities account in the fiscal year 1995 appropriations act, or for which a report was requested, please list the amount of funding provided to date, the total estimated cost of the project, the current status of the project, and the status of the non-federal project match.

Answer: [The information follows:]

**STATUS OF FACILITIES FUNDED (OR REPORTS REQUESTED)
COOPERATIVE STATE RESEARCH, EDUCATION, AND EXTENSION SERVICE, FY 1995**

RESEARCH AND EXTENSION ACTIVITIES

4/12/95

FACILITY/LOCATION	TOTAL EST. COST OF FACILITY	FUNDING TO DATE (Gross)	STATUS OF PROJECT	STATUS OF NON-FEDERAL MATCHING	ISSUES
Poultry Sci. Fac., Auburn Univ. (Auburn, AL)	\$12,000,000	\$522,000	Feasibility study conducted by CSREES; project has been recommended for funding and processed for award. Design work underway	No matching funds available in FY 1995, but assurance of required match has come from State and poultry industry sources	None
Agriculture Bldg., Univ. of Arkansas (Little Rock)	8,423,000	4,000,000	Design work completed, construction initiated	Matching funds are available	None
Restoration of Carnall Hall, Univ. of Arkansas (Fayetteville)	6,000,000	946,000	Preplanning work under way	Approx. one-half of the required match has been pledged	None
Altern. Pest Control Containment and Quarantine Facility, Univ. of California (Davis & Riverside)	35,000,000	4,364,000	Design work ongoing and construction to be initiated in FY 1995	Only \$265,000 in matching funds are available, with balance budgeted for Univ. Capital Program in FY 1997 (and in-kind value of land to be proposed as part of match)	Significant matching funds apparently will not become available until 1997
Animal Reproduction & Biotech. Facility, Colorado State University (Fort Collins)	5,055,000	1,551,000	Design work completed and construction initiated in FY 1995	All matching funds are available	None
Renovation of Chemistry Bldg., Connecticut Agric. Expt. Station (New Haven)	5,000,000	- 0 -	CSREES feasibility study conducted March 1995; report submitted to Congress	The State has agreed to provide the necessary match	As a result of feasibility study, CSREES requested that a revised proposal be submitted to justify the use of Federal funds for this project

FACILITY/LOCATION	TOTAL EST. COST OF FACILITY	FUNDING TO DATE (Gross)	STATUS OF PROJECT	STATUS OF NON-FEDERAL MATCHING	ISSUES
Agric. Biotech. Lab., Univ. of Connecticut (Storrs)	20,000,000	568,000	Design work underway	Matching funds to be made available annually by the State	None
Poultry Biocontainment Lab., Univ. of Delaware (Newark)	7,000,000	1,749,000	Design complete, construction initiated	Est. one-half of match is available, with balance to be secured by early 1996	None
Aquatic Research Fac., Univ. of Florida (Gainesville)	4,100,000	- 0 -	CSREES feasibility study to be conducted. Design development underway.	Some (almost half) matching funds are available.	None
Biocontainment Fac., Univ. of Georgia (Athens)	16,000,000	8,000,000	Design complete, construction initiated in 1995	Matching funds are available	None
Agric. Biotech. Fac., University of Idaho (Moscow)	13,479,000	4,117,000	Design complete, construction completed on an Aquaculture Lab (one component of the project)	In 1991 Univ. provided approx. \$1,000,000 to complete an aquaculture lab (but not all expenditures have been accepted by CSREES), but only \$250,000 in additional State appropriations have been secured. Univ. was not able to receive State appropriations for this project in FY 1993, 1994, or 1995, but anticipates some State funding in FY 1997	Funds made available in 1993 and 1994 have been carried over due to lack of matching support and delayed and/or unacceptable proposal submissions
Biological & Environ. Sci. Fac., DePaul Univ. (Chicago)	10,000,000	435,000	Planning underway. A feasibility study will be conducted by CSREES	Matching to be obtained through gifts, institutional funds, and loans, some of which are available	None
Biotech. Ctr., Northwestern Univ. (Chicago)	24,400,000	5,170,000	Construction scheduled for completion in 1995	Matching available	None

FACILITY/LOCATION	TOTAL EST. COST OF FACILITY	FUNDING TO DATE (Gross)	STATUS OF PROJECT	STATUS OF NON-FEDERAL MATCHING	ISSUES
Swine Development and Training Ctr., Univ. of Kentucky (Princeton)	1,794,000	897,000	Feasibility study requested in FY 1994 conducted by CSREES in FY 1995; project has been recommended for funding and is being processed for award. Planning underway	Matching to be made available by the Univ.	None
Animal Research Fac., Louisiana State Univ. (Franklinton) and Mississippi State Univ. (Poplarville)	2,560,000	- 0 -	Pre-design work underway. A feasibility study will be conducted by CSREES May 2-4	LSU match will be requested from the State legislature in 1995-96; MSU match could be available from State appropriations in 1996	None
Food Science Fac., Univ. of Maine (Orono)	996,000	- 0 -	Renovation design work underway. A feasibility study may be conducted by CSREES pending submission of proposal and confirmation regarding matching availability	CSREES needs to confirm that matching funds may not be available for this project (a call has been made, waiting for return call from Univ.)	Possible lack of matching; no proposal has been submitted
Inst. for Nat. Resources & Environ. Sci., Univ. of Maryland (College Park)	23,800,000	5,424,000	Design work underway	A majority of the required matching funds have been secured	None
Ctr. for Hunger, Poverty, Nutrition, & Policy, Tufts Univ. (Boston)	28,272,000	5,709,000	Design work underway	CSREES is considering the Univ.'s proposed use of the in-kind value of land as part of its matching contribution. Cash may become available for additional matching purposes in the future	None

FACILITY/LOCATION	TOTAL EST. COST OF FACILITY	FUNDING TO DATE (Gross)	STATUS OF PROJECT	STATUS OF NON-FEDERAL MATCHING	ISSUES
Ctr. for Water & Wetlands Resources, Univ. of Mississippi (Oxford)	6,510,000	1,700,000	Design work ongoing	Approx. one-half of matching funds are secured from State appropriations, and Univ. indicates that they are working on obtaining remainder	None
National Food Service Mgmt. Inst., Univ. of Mississippi (Oxford)	6,000,000	- 0 -	Feasibility study will be conducted by CSREES May 17-18	Unknown	None
Ctr. for Plant Biodiversity, Missouri Botanical Garden (St. Louis)	15,826,000	757,000	Design work ongoing	At least \$5-6 million currently available	None
Bioscience Res. Lab., Montana State Univ. (Bozeman)	16,000,000	8,000,000	Design work complete. Construction has not been initiated because State requires that all funds must first be in hand. State is expected to provide matching share since all Federal funds have now been made available	Expected to be provided now since all Federal funds have been made available	None
Great Basin Environ. Res. Lab., EcoCELLS, Desert Research Institute (Reno, NV)	465,000	250,000	Feasibility study conducted by CSREES; project has been recommended for funding and is being processed for award. Funds to be used to construct two EcoCELLS within an existing facility. Design work complete	Matching funds are available	None
Ctr. for Molecular Biology, Rutgers Univ. (New Brunswick, NJ)	84,600,000	14,574,000	Construction underway	Matching funds are available	None
Ctr. for Arid Land Studies, New Mexico State Univ. (Las Cruces, NM)	22,600,000	2,218,000	Design work underway	All matching funds were to be available through State appropriations in 1995	None

FACILITY/LOCATION	TOTAL EST. COST OF FACILITY	FUNDING TO DATE (Gross)	STATUS OF PROJECT	STATUS OF NON-FEDERAL MATCHING	ISSUES
Library/Herbarium, New York Botanical Gardens (New York, NY)	26,000,000	11,335,000	Design work ongoing	A majority of matching funds are available	None
Ctr. for Res. on Human Nutri./Chronic Disease Prevention, Wake Forest Univ. (Winston-Salem, NC)	99,577,000	14,108,000	Construction ongoing	In-kind matching contributions were accepted by CSREES	Project deemed to be only minimally within mission of agency
Inst. for Agric. and Rural Human Resource Dev., Minot State Univ. (Minot, ND)	10,300,000	4,779,000 (less \$272,000 to be carried over)	Construction ongoing	All of matching that Univ. is capable of providing is available. FY 1995 Federal funding was reduced by \$272,000 because the Univ. could not match that amount	None
Lake Erie Soil & Water Res. & Educa. Ctr., Univ. of Toledo (Toledo, OH)	5,600,000	492,000	Design work nearly complete	Matching made available through State appropriations in 1994	None
Beef Cattle Res. Fac., Oklahoma State Univ. (Stillwater, OK)	1,500,000	727,000	Design work ongoing	All matching funds are available	None
Grain Storage Res./Ext. Ctr., Oklahoma State Univ. (Stillwater, OK)	990,000	- 0 -	CSREES will conduct a feasibility study May 8-9	All matching funds are available	None
Forest Ecosystem Res. Lab., Oregon State Univ. (Corvallis, OR)	20,000,000	- 0 -	CSREES to conduct a feasibility study	All matching funds are available	None
Regional Food Innovation Ctr., Oregon State Univ. (Portland, OR)	10,620,000	4,900,000	Design work ongoing	All matching funds are available	None

FACILITY/LOCATION	TOTAL EST. COST OF FACILITY	FUNDING TO DATE (Gross)	STATUS OF PROJECT	STATUS OF NON-FEDERAL MATCHING	ISSUES
Ctr. for Food Marketing, St. Joseph's Univ. (Philadelphia, PA)	25,600,000	9,962,000	Design work underway	Costs previously incurred by the Univ. on two components of this project have tentatively been accepted by CSREES (additional information regarding those costs has been requested from the Univ.). The match will be met if all costs are deemed acceptable by CSREES	None
Animal Resource Wing, South Dakota State Univ. (Brookings, SD)	10,800,000	- 0 -	CSREES to conduct a feasibility study	All matching funds are available	None
Horse Science & Technology Ctr., Middle Tennessee Univ. (Murfreesboro, TN)	4,028,000	- 0 -	CSREES conducted a feasibility study April 20; report is being prepared for Congress	Unknown	None
Nursery Crops Research Station, Tennessee State Univ. (McMinnville, TN)	3,400,000	1,700,000	Construction underway	All matching funds are available	None
Agric., Biological, & Environ. Res. Complex, Univ. of Tennessee (Knoxville, TN)	38,500,000	5,756,000	Construction to be initiated in 1995	Matching funds of \$5-6 million are available now, the balance to be pursued from State appropriations	None
Animal Biocontainment Fac., Texas A&M Univ. (College Station, TX)	35,000,000	- 0 -	CSREES will conduct a feasibility study May 25-26	Matching funds are not currently available	None

FACILITY/LOCATION	TOTAL EST. COST OF FACILITY	FUNDING TO DATE (Gross)	STATUS OF PROJECT	STATUS OF NON-FEDERAL MATCHING	ISSUES
Southern Crop Improvement, Texas A&M Univ. (College Station, TX)	14,500,000	1,092,000	Design work ongoing	Costs previously incurred by the Univ. under the first phase of this project have been accepted by CSREES as the match for the second phase which is being funded with Federal funds	None
Biotech. Lab., Utah State Univ. (Logan, UT)	7,113,000	2,864,000	Construction ongoing	All matching funds are available	None
Rural Community Interactive Learning Ctr., Univ. of Vermont (Burlington, VT)	21,000,000	- 0 -	CSREES to conduct a feasibility study	All matching funds are available	None
Animal Disease Biotech. Fac., Washington State Univ. (Pullman, WA)	52,062,000	14,559,000	Construction ongoing	All matching funds are available	None
Wheat Research Fac., Washington State Univ. (Pullman, WA)	8,000,000	426,000	CSREES to conduct a feasibility study	Partial matching funds are available	None
Natural Resources Bldg., Univ. of Wisconsin (Stephens Point, WI)	10,857,000	4,825,000	Construction to be initiated in 1995	All matching funds are available	None

BUDGET REQUEST

Question: Please provide for the record CSREES' budget requests submitted to the Department and the Department's requests for CSREES submitted to the Office of Management and Budget.

Answer: [The information follows:]

USDA - COOPERATIVE STATE RESEARCH, EDUCATION,
AND EXTENSION SERVICE

FY 1996 FUNDING HISTORY
(Dollars in Thousands)

<u>Programs</u>	FY 1995 Approp. <u>Act</u>	FY 1996 Agency <u>Est.</u>	FY 1996 Dept. <u>Est.</u>	FY 1996 Budget <u>Est.</u>
Research and Education Activities				
Hatch Act.	\$171,304	181,582	176,443	\$171,304
McIntire-Stennis				
Cooperative Forestry .	20,809	22,058	21,434	20,809
Evans-Allen Program .	28,157	29,846	29,000	28,157
Animal Health and Disease, Section 1433	5,551	5,884	5,718	5,551
<i>Subtotal</i>	225,821	239,370	232,595	225,821
Special Research Grants:				
Alternatives to Pesticides and Critical Issues . . .	- -	- -	10,000	5,000
Animal Genome Mapping .	- -	3,000	- -	- -
Employment Issues and Opportunities for Rural Families and Communities	- -	3,000	- -	- -
Energy				
Biomass/Biofuels . .	- -	1,000	1,000	750
Global Change	1,625	3,500	3,500	3,500
Integrated Pest Management and Biological Control . .	2,731	10,000	7,000	7,000
Minor Use Animal Drugs	550	950	950	550
National Biological Impact Assessment Program	254	500	500	300

<u>Programs</u>	FY 1995 Approp. <u>Act</u>	FY 1996 Agency <u>Est.</u>	FY 1996 Dept. <u>Est.</u>	FY 1996 Budget <u>Est.</u>
Special Research Grants				
cont'd:				
Pesticide Clearance (IR-4)	5.711	11.300	15.000	15.000
Pesticide Impact Assessment	1.327	2.968	2.968	2.968
Rapid Response to Crisis Issues	- -	3.000	- -	- -
Rural Development Center	423	500	500	450
Synchrotron	- -	2.500	- -	- -
Targeted Issues in Animal Health, Food Safety and Animal Well-Being	- -	3.000	- -	- -
Tropical and Subtropical Research	2.809	3.320	- -	- -
Water Quality	2.757	5.000	4.500	4.500
Other	43.098	- -	- -	- -
<i>Subtotal</i>	61,285	53,538	45,918	40,018
National Research Initiative Competitive Grants Program (NRI):				
Natural Resources and the Environment	16.650	34.000	27.000	27.000
Nutrition, Food Safety, and Health	7.400	14.000	11.000	11.000
Plants	37.000	60.000	47.000	47.000
Animals	23.125	40.000	29.500	29.500
Processing for Adding Value or Developing New Products	6.935	14.000	9.000	9.000
Markets, Trade, and Rural Development	3.700	8.000	6.500	6.500
Water Quality	4.708	- -	- -	- -
Integrated Pest Management	2.310	- -	- -	- -
Pesticide Impact Assessment	1.295	- -	- -	- -
<i>Subtotal</i>	103,123	170,000	130,000	130,000
Other Research:				
Critical Agricultural Materials	500	- -	- -	- -

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<u>Programs</u>	FY 1995 Approp. <u>Act</u>	FY 1996 Agency <u>Est.</u>	FY 1996 Dept. <u>Est.</u>	FY 1996 Budget <u>Est.</u>
Other Research cont'd:				
Rangeland Research . . .	475	600	475	475
Aquaculture Centers . . .	4,000	4,500	4,500	4,333
Sustainable				
Agriculture Program . .	8,112	10,000	10,000	9,500
Natural Products and				
Pharmaceuticals	- -	2,000	- -	- -
Supplemental and				
Alternative Crops	1,318	3,000	3,000	2,250
Federal Administration				
(Direct Appropriation)	10,037	2,365	1,881	1,765
<i>Subtotal</i>	24,442	22,465	19,856	18,323
Higher Education:				
Graduate Fellowships				
Grants	3,500	4,000	4,000	3,500
Institution Challenge				
Grants	4,350	5,000	5,000	1,500
1890 Institution				
Capacity Building				
Grants	9,917	11,500	11,500	10,550
Multicultural Scholars				
Program	1,000	2,500	2,000	1,000
Morrill-Nelson	- -	2,850	- -	- -
Hispanic Education				
Partnership Grants . . .	- -	4,000	4,000	1,500
Native American				
Endowment Fund	- -	- -	4,600	4,600
<i>Subtotal</i>	18,767	29,850	31,100	22,650
Total, Research and				
Education	433,438	515,223	459,469	436,812
Buildings and				
Facilities	62,744	- -	- -	
1890 Research				
Facilities	- -	20,000	- -	- -
Competitive Research				
Facilities	- -	34,000	- -	- -
<i>Subtotal</i>	62,744	54,000	- -	- -
Total, Research and				
Education Activities	496,182	569,223	459,469	436,812
Extension Activities				
Smith-Lever Formula				
3(b)(c)*	\$272,582	288,757	280,759	\$272,582
1890 Institutions	25,472	30,000	26,236	26,236

<u>Programs</u>	FY 1995 Approp. <u>Act</u>	FY 1996 Agency <u>Est.</u>	FY 1996 Dept. <u>Est.</u>	FY 1996 Budget <u>Est.</u>
Extension Activities				
cont'd:				
Water Quality	11.234	11.234	11.234	11.234
Youth and Families at Risk	10.000	20.000	10.000	10.000
Food Safety	2.475	5.950	2,975	2.475
Nutrition Education . .	4.265	8.765	4,265	4.265
Farm Safety	2.988	2.988	988	988
Pest Management	10.947	22.459	15.000	15.000
Pesticide Impact Assessment	3.363	3.363	3.363	3.363
Pesticide Applicator Training	0	2.000	2,000	2.000
EFNEP	61.431	61,431	61.431	61.431
Rural Development Centers	950	6.950	950	950
Indian Reservation Extension Agents	1.750	3.500	1,750	1.750
Sustainable Agriculture	3.463	6.963	4.963	4.963
Renewable Resources Extension Act	3.341	9.341	3,341	3.341
Ag Telecommunications .	1.221	3.000	1,221	1.221
Rural Health & Safety .	2.750	2,250	2,750	2.750
Decisions for Health .	0	5.000	0	0
Federal Administration	12.611	8.066	5.121	5.102
<i>Subtotal</i>	430,843	502,017	438,347	429,651
1890 Facilities				
(Sec. 1447)				
Current Law	7.901	7.901	7.901	7.901
Proposed Legislation .	- -	- -	- -	7.099
<i>Subtotal</i>	7,901	7,901	7,901	15,000
Total, Extension				
Activities	438,744	509,918	446,248	444,651
Total, Cooperative State				
Research, Education, and				
Extension Service	934,926	1,079,141	905,717	881,463

**Includes D.C. Extension
Funding.*

QUESTION SUBMITTED BY SENATOR GORTON**CSREES REGIONAL BARLEY GENE MAPPING PROJECT
SPECIAL RESEARCH GRANT**

Question: Congress has been providing funding through a CSREES Special Grant to the Regional Barley Gene Mapping Project, which funds research projects throughout the U.S. and is a multi-institutional, multi-disciplinary effort applying new genetic technology to barley improvement.

How does the CSREES view this project? Does it represent a model approach for plant genome mapping projects? Will it help maintain a profitable, competitive, and productive barley industry in the United States? Will it address critical problems, such as barley stripe rust disease, which threatens barley production in the Pacific Northwest?

Answer: The Barley Gene Mapping project is a multi-disciplinary effort involving scientist from many institutions working cooperatively to develop a map of the barley genome. This project is a model of focused-coordinated effort in which a small amount of grant funding was used to bring together plant breeders, genetics and molecular biologists representing most of the barley research programs across the nation. These funds have leveraged resources of the individual participants into a single, integrated and focused program. This team has succeeded in mapping many important genes and developed molecular markers that can speed up efforts to move resistance gene into commercial cultivars in response to critical problems such as barley stripe rust.

QUESTIONS SUBMITTED BY SENATOR BURNS**USDA EPSCoR**

Question: Congress has always directed that 10 percent of the CSRS funding be set aside for EPSCoR states. Again, this year, there is no funding request by USDA for EPSCoR. Last week, as Chairman of the Subcommittee on Science, Technology and Space of the Senate Commerce Committee, I chaired a hearing on the authorization for the National Science Foundation. One of the programs which we discussed was the EPSCoR (Experimental Program to Stimulate Competitive Research) program. Last year, this subcommittee directed that 10 percent of the Competitive Research Grant Funds be used for a USDA EPSCoR program. How did you respond to this directive?

Answer: These funds were used as part of the Strengthening Awards Program of the National Research Initiative Competitive Grants Program of the USDA. Specifically, they were used to provide research career enhancement awards, equipment grants, seed grants, and standard research project awards to eligible researchers at States that qualify by USDA criteria as USDA EPSCoR States. Ten percent of NRI funds have been set aside for this program in 1995.

Question: How did you designate eligible States for FY 1995? Will there be any change in the designations for FY 1996?

Answer: Each year the total National Research Initiative Competitive Grants funding to each state is calculated, averaged with the previous two years' funding, and used to rank order states by average funding. USDA EPSCoR States were defined in 1995 as States with an average funding level from the USDA National Research Initiative Competitive Grants Program no higher than the 38th percentile based on this 3-year rolling average. Scientists at academic institutions within USDA EPSCoR States and also Puerto Rico who have not received a strengthening award within the past 5 years are eligible. The 1996 call for proposals will use the same state eligibility requirements but will be expanded to include all U.S. territories and possessions.

Question: What program areas were eligible for EPSCoR funding in fiscal year 1995, and what areas will be eligible in fiscal year 1996?

Answer: USDA-EPSCoR eligible applicants may apply to any of the 28 scientific programs within the National Research Initiative Competitive Grants Program. These include programs within the broad areas of natural resources and the environment; nutrition, food quality and health; plant systems; animal systems; markets, trade and rural development, new products and processes, water quality, integrated pest management and pesticide impact assessment. All programs of the National Research Initiative funded in fiscal year 1996 will be eligible for USDA-EPSCoR funding.

Question: Please provide a list of the USDA-EPSCoR States and the amount of funding which each has received, by year, for FY 1992-94.

Answer: [The formation follows:]

UNITED STATES DEPARTMENT OF AGRICULTURE EPSCoR STATES
National Research Initiative Funds Awarded
Fiscal Years 1992-1994

<u>State</u>	<u>FY 1992</u>	<u>FY 1993</u>	<u>FY 1994</u>
Alaska	\$626,252	\$781,022	\$50,237
Arkansas	792,380	149,895	312,500
Connecticut	933,088	1,495,065	1,882,294
Delaware	0	650,490	368,406
Hawaii	516,754	439,378	313,807
Idaho	494,935	971,559	597,711
Maine	533,084	388,940	360,483
Mississippi	569,024	700,746	646,738
Montana	907,287	727,509	1,104,120
Nevada	0	0	606,647
New Hampshire	384,111	557,459	633,018
New Mexico	459,875	404,013	543,575
North Dakota	472,224	1,351,011	978,725
Rhode Island	283,896	484,318	744,256
South Carolina	847,383	851,301	725,862
South Dakota	656,879	529,453	437,230
Vermont	389,812	618,070	121,070
West Virginia	444,387	910,502	197,001
Wyoming	<u>360,963</u>	<u>579,429</u>	<u>571,853</u>
TOTAL	9,672,334	12,590,160	12,095,533

NATIONAL RESEARCH INITIATIVE COMPETITIVE GRANTS PROGRAM

Question: Please provide a list by state, of all National Research Initiative amounts for FY 1994.

Answer: [The information follows:]

National Research Initiative
Fiscal Year 1994 Funding

<u>STATE</u>	<u>FISCAL YEAR 1994 ACTUAL</u>
ALABAMA	\$950,237
ALASKA	312,500
ARIZONA	1,230,857
ARKANSAS	532,299
CALIFORNIA	11,344,134
COLORADO	1,827,724
CONNECTICUT	1,220,729
DELAWARE	368,406
DISTRICT OF COLUMBIA	157,000
FLORIDA	2,214,203

GEORGIA	2,056,991
HAWAII	313,807
IDAHO	597,711
ILLINOIS	5,836,116
INDIANA	3,072,918
IOWA	2,054,495
KANSAS	1,243,260
KENTUCKY	1,296,020
LOUISIANA	1,010,679
MAINE	360,483
MARYLAND	1,562,612
MASSACHUSETTS	2,906,629
MICHIGAN	2,978,307
MINNESOTA	1,709,129
MISSISSIPPI	646,738
MISSOURI	2,595,568
MONTANA	1,104,120
NEBRASKA	1,576,986
NEVADA	606,647
NEW HAMPSHIRE	633,018
NEW JERSEY	1,403,237
NEW MEXICO	543,575
NEW YORK	6,115,278
NORTH CAROLINA	4,034,528
NORTH DAKOTA	978,725
OHIO	1,760,413
OKLAHOMA	1,016,410
OREGON	2,623,430
PENNSYLVANIA	2,656,537
PUERTO RICO	130,000
RHODE ISLAND	744,256
SOUTH CAROLINA	725,862
SOUTH DAKOTA	437,230
TENNESSEE	1,446,682
TEXAS	5,053,986
UTAH	584,570
VERMONT	121,070
VIRGINIA	1,383,497
WASHINGTON	4,765,554
WEST VIRGINIA	197,001
WISCONSIN	5,017,424
WYOMING	571,853
SBIR	1,484,222
PEER PANEL	<u>475,376</u>
SUBTOTAL	98,591,039
FEDERAL ADMIN	4,122,840
BIOTECH RISK ASSESSMENT	<u>357,121</u>
TOTAL	103,071,000

SUPPLEMENTAL AND ALTERNATIVE CROPS

Question: I understand that the Administration is requesting a \$1 million increase in the Supplemental and Alternative Crops line of the budget. Of the current \$1.3 million appropriated for FY 1994/95, \$500,000 is allocated for research on canola, a rapidly developing industry in Montana. According to the USDA, "strong U.S. demand for canola oil in 1994/95 is expected to outstrip domestic production, resulting in substantial imports on Canadian canola oil." Domestic demand canola oil is expected to reach 1.422 billion pounds in 94/95, while canola imports, including seed, are expected to reach 1.388 billion pounds, or 98% of U.S. production.

I understand that the canola industry is supporting a check off program in the 1995 Farm Bill. Producers in Georgia and North Dakota, realizing the need to financially support the industry, have established their own state check off programs. Mr. Carlson, knowing of the industry's support, wouldn't you agree that the projected increase in U.S. demand for canola oil would warrant additional funds for canola research?

Answer: Using directed funding under the Supplemental and Alternative Crops authority of the 1990 Farm Bill, regional centers for canola were established in fiscal year 1994 in Arkansas, Colorado, Georgia, Idaho, Illinois, and North Dakota. These centers are engaged in agricultural production research to assist in broadening the base for production of canola and to improve crop yield and agronomy. There are other university-based canola research projects in at least six states (Georgia, Idaho, Kansas, New Mexico, Ohio and South Dakota) covering topics such as agronomy, insect resistance and hybridization. In addition, the Agricultural Research Service conducts a cultural practices program for canola in Georgia.

The Administration's fiscal year 1996 request under the Supplemental and Alternative Crops authority is \$2.25 million to support an effort to develop uses for vegetable oils and other plant and animal materials that provide products of strategic and industrial importance to the Nation. The program is to involve private companies, government, and universities in multi-year partnerships that join resources, facilities and ideas to progressively remove barriers to commercialization, ultimately taking an industrial product or process to the point of private investment, either alone or in companion with an organization like the USDA Alternative Agricultural Research and Commercialization Center.

Additional agronomic research support for canola can come from formula funds, regional research projects and competitively through the National Research Initiative. Industrial applications of canola oil could be supported under the Administration's program proposed for funding in 1996 under Supplemental and Alternative Crops.

QUESTIONS SUBMITTED BY SENATOR HARKIN

RESEARCH AND EXTENSION PROGRAMS

Question: The Committee has made its intention clear that research and extension activities should foster family farming, reiterating that point in last year's report:

The Committee expects the Department to ensure that its research and extension activities advance each of the purposes outlined in section 1602 of the 1990 farm bill. The Committee expects the Department, in seeking to advance the goal of providing economic opportunities in rural America, to promote the objective of increasing self-employment opportunities in family farming and rural communities.

What has been done to date to implement the national research and extension purposes?

Answer: Meetings have been held with other agencies and organizations to discuss the intention of the Committee. The February 1994 Strategic Agenda for the State Agricultural Experiment Stations, identified 22 initiatives. Three of these were to enhance agricultural and rural economies, strengthen communities and empower people for economic and social viability. A crosscutting issue was identified as sustainable ecosystems which would provide producers with the knowledge to have environmentally sound, economically rewarding and socially acceptable farming systems that produce high quality food with minimum purchased input.

Question: What is the current status of developing guidelines to implement the purposes?

Answer: Guidelines have been developed for classifying research projects as to meeting the criteria for sustainable agriculture. This was a joint ARS and CSREES taskforce. Seven criteria were used to classify projects. ARS has classified their projects and CSREES worked with the Agricultural

Experiment Stations to use the protocol over a 3-year period. The large number of Agricultural Experiment Station projects led to the assessment over a period of years.

Question: Has the goal of promoting family farming and rural community economic opportunities been fully incorporated into priority setting and program evaluation?

Answer: This goal has not been fully incorporated in all priority setting and program evaluation. However, these goals are a key priority in sustainable agriculture programs and are fully integrated into the decisionmaking process for funding. Promoting rural economic opportunities is a goal the agency is pursuing.

CSREES has a focused effort in sustainable agriculture through funding for the Sustainable Agriculture Research and Education --SARE-- program and the Sustainable Agriculture Technology Development and Training Program --SATDTP--. Both programs award competitive grants through a regional structure, with recommendations on funding made by regional councils. These councils include scientists, producers, non-profit and agribusiness representatives, and agency staff. The SARE program funds primarily research projects, most of which include an outreach component. Part of the SARE program funding is used to match funds from the Environmental Protection Agency --EPA-- for the Agriculture in Concert with the Environment --ACE-- program. ACE research and education funds are also competitively awarded through the regional councils. The SATDTP effort is the newest program, and is providing support for Extension workshops, videos, curricular materials, and strategic planning activities.

The funds have supported research and extension programs at regional levels, university research and extension projects, farmer initiated grants, National Agricultural Library for a sustainable agriculture reference base, special projects, and the Sustainable Agriculture Network.

UNITED STATES DEPARTMENT OF AGRICULTURE RESEARCH AND EXTENSION PROGRAM

Question: I continue to be interested and concerned about the degree of coordination among the USDA research and extension programs in sustainable agriculture, integrated pest management --IPM--, water quality and related areas. There are clearly important interactions among these programs, and I am concerned that the programs too often appear to operate separately. If

that is the case, we lose out on gains and efficiencies that could result from better integration and coordination. Last year's Committee report addressed this issue:

The Committee encourages the Department to improve coordination and integration of research and extension programs in sustainable agriculture, integrated pest management, and water quality on a national and regional basis. Whenever possible, these programs should encourage public-private partnerships, farmer involvement, and multi-state and regional projects.

The budget request proposes increases in IPM programs, but without indicating how the Department intends to follow the Committee's recommendation to work on these issues in the larger context of sustainable agriculture and the integrated farming systems research and extension.

Farmers, of course, must integrate practices at the farm level, whether they might be drawn from IPM, water quality, or the sustainable agriculture research program, or another source. Could we not better help the farmer by bringing our research and education programs together, clearly focused on an integrated systems approach?

Answer: Yes, our farmers and ranchers will benefit from a more focused system and we are making progress in that direction. For example, last year we funded Integrated Pest Management --IPM-- pilot research and extension efforts in the North Central Region with common objectives but separate sources of funding. This approach will be followed in the other regions in fiscal year 1995. The National Research Initiative Competitive Grants Program established an "Agricultural Systems" research program in 1993 to support innovative, crossdisciplinary efforts to address complex, integrated agricultural production and processing systems, and environmental and social issues. Approximately \$2 million has been redirected from other NRI programs to support this effort each year. In addition, water quality research, integrated pest management, and other system issues have been supported through competitive and programmatic research authorities.

Question: What have you done to implement last year's report language? What can we expect to result from any such efforts?

Answer: The Department is moving forward to establish a sustainable agriculture working group which will integrate more

thoroughly the water quality and IPM aspects. Our goal is to present a more efficient approach resulting in coordinated outcomes useful to the producers in the immediate short term.

AUTHORIZATIONS FOR RESEARCH FUNDING

Question: USDA materials provided to the authorizing committee on the FACT ACT indicate that authorized research programs have in many cases been funded under "other authorities". For each of the following funded research activities listed by USDA in the "Footnotes to the FACT ACT Tables" to be funded under other authorities, please provide the specific authority or authorities being reference and give the statutory citation for each:

- A. Water Quality Research
 - ARS
 - CSREES - Research and Education
 - CSREES - Extension Activities
- B. IR-4
 - ARS
 - CSREES - Research and Education
- C. Animal Health & Disease National and Regional Research
(Section 1434(a))
 - ARS
 - CSREES - Research and Education
- D. Extension education, other than those activities funded under
Section 1464 of NARETPA and the Smith-Lever Act
 - CSREES - Extension Activities
- E. Alcohol Fuels Research
 - ARS
 - CSREES - Research and Education
- F. Centers of Excellence
- G. Aquaculture Assistance Programs
 - ARS
 - CSREES - Research and Education
 - CSREES - Extension Activities
 - Economic Research Service
 - National Ag Statistics Service
 - APHIS

- H. Sustainable Agriculture Research and Education
 - ARS
 - CSREES - Research and Education
 - CSREES - Extension Activities
- I. National Training Program in sustainable agriculture
 - CSREES - Extension Activities
- J. The National Genetics Resources Program
 - ARS
 - CSREES - Research and Education
- K. Food Safety
 - ARS
 - CSREES - Research and Education
- L. Integrated Pest Management Research
 - ARS
 - CSREES - Research and Education
- M. Selected Programs Authorized in Section 1672
 - ARS
 - CSREES - Research and Education
- N. Global Change Research
 - ARS
 - CSREES - Research and Education
 - Economic Research Service
 - Natural Resources Conservation Service
 - Forest Service

(The information follows.)

A. Water Quality Research

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Hatch Act	7 U.S.C. 361a-361i
McIntire-Stennis	
Cooperative Forestry	16 U.S.C. 582a-7
Evans-Allen Program	7 U.S.C. 3222
Animal Health & Disease	
Research	Section 1433 7 U.S.C. 3195
Special Research Grants	7 U.S.C. 450i(c)

National Research Initiative	7 U.S.C. 450i(b)
Dir. Fed Administration	Sec. 1472(c) of P.L. 95-113
Graduate Fellowships Grants	Sec. 1417(b)(6) 7 U.S.C. 3152

CSREES - Extension activities

Smith-Lever 3d	7 U.S.C. 341
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B. IR-4

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Hatch Act	7 U.S.C. 361a-361i
Special Research Grants	7 U.S.C. 450i(c)

C. Animal health & disease national or regional research (Section 1434(a))

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Hatch Act	7 U.S.C. 361a-361i
McIntire-Stennis	
Cooperative Forestry	16 U.S.C. 582a-7
Evans-Allen Program	7 U.S.C. 3222
Animal Health and Disease	
Research	Section 1433 7 U.S.C. 3195
Special Research Grants	7 U.S.C. 450i(c)
National Research Initiative	7 U.S.C. 450i(b)
Direct Federal Administration	
1890 Capacity Bldg. Grants	Sec. 1472(c) of P.L. 95-113

D. Extension education, other than those activities funded under Section 1464 of NARETPA and the Smith-Lever Act**CSREES - Extension Activities**

Smith-Lever 3(b&c)	7 U.S.C. 341
Smith-Lever 3(d)	7 U.S.C. 341
RREA	16 U.S.C. Sec. 1671 of P.L. 95-306
D.C. Extension	D.C. Code 31-1718 Sec. 208 of P.L. 93-471

Ag Telecomm.	7 U.S.C. 5926 Sec. 1673 of P.L. 101-624
Rural Tech Grants	7 U.S.C. 1932 Sec. 2347 of P.L. 101-624
Rural Health Safety	7 U.S.C. 2661 Section 2390 of P.L. 101-624
Social Disadv. Farmers	7 U.S.C. 2279 Sec. 2501 of P.L. 101-624
Dislocated Farmers	7 U.S.C. 2662 Sec. 2389 of P.L. 101-624
1890's	7 U.S.C. 341
1890 Facilities	7 U.S.C. 3224 Section 1416 of P.L. 101-624
Sec. 1447 Facilities	7 U.S.C. 3222(b) Section 1447 of P.L. 101-624
Federal Admin.	7 U.S.C. 341

E. Alcohol fuels research

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Hatch Act	7 U.S.C. 361a-361i
McIntire-Stennis	
Cooperative Forestry	16 U.S.C. 582a-7
Evans-Allen Program	7 U.S.C. 3222
Special Research Grants	7 U.S.C. 450i(c)
National Research Initiative	7 U.S.C. 450i(b)

F. Centers of Excellence

CSREES - Extension Activities

Smith Lever Act	7 U.S.C. 341
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ARS	7 U.S.C. 2201-2204 7 U.S.C. 427, 1621-1627
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Animal and Plant Health

Inspection Service	7 U.S.C. 147a, 148, 148a-e 21 U.S.C. 114b-114c, 114d-1
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Forest Service	P.L. 102-154
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Food Safety and Inspection Service	7 U.S.C. 427, 3318
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Natural Resources

Conservation Service 16 U.S.C. 590a-590f,
2001-2009

Agricultural

Marketing Service 7 U.S.C. 1621-1627

Consolidated Farm

Service Agency 7 U.S.C. 1621-1627
31 U.S.C. 1535

Economic

Research Service 7 U.S.C. 1621-1627

Food and

Consumer Service 7 U.S.C. 1621-1627

Foreign Agricultural

Service 7 U.S.C. 1621-1627

G. Aquaculture assistance programs

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES -Research and EducationResearch Activities:

Hatch Act 7 U.S.C. 361a-361i

McIntire-Stennis

Cooperative Forestry 16 U.S.C. 582a-7

Evans-Allen Program 7 U.S.C. 3222

Animal Health and Disease

Research, Section 1433 7 U.S.C. 3195

Special Research Grants 7 U.S.C. 450i(c)

National Research Initiative 7 U.S.C. 450i(b)

Dir. Fed Admin:

Gulf Coast Shrimp Sec. 1472(c) of P.L. 95-113

1890 Capacity Bldg. Grants Sec. 1472(c) of P.L. 95-113

Aquaculture Centers 7 U.S.C. 3322(d)

Education Activities:**Direct Federal Administration:****Vocational**

Aquaculture Education Sec. 1472(c) of P.L. 95-113

Extension Activities

Smith-Lever Act 7 U.S.C. 341 et seq.

Economic Research Service 17 U.S.C. 1622

National Agricultural
Statistics Service 17 U.S.C. 1622

APHIS - Animal Damage Control Act of March 2, 1931, (7 U.S.C. 426-426b, and 426c as amended); Federal Noxious Weed Act of 1974 (7 U.S.C. 2801; PL 93-269); Virus-Serum-Toxin Act of March 14, 1913 (21 U.S.C. 151-158) and Food Security Act amended December 23, 1985; and the Animal Industry Act of 1884.

H. Sustainable agriculture research and education

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Hatch Act	7 U.S.C. 361a-361i
McIntire-Stennis	
Cooperative Forestry	16 U.S.C. 582a-7
Evans-Allen Program	7 U.S.C. 3222
Animal Health and Disease	
Research, Section 1433	7 U.S.C. 3195
Special Research Grants	7 U.S.C. 450i(c)
National Research Initiative	7 U.S.C. 450i(b)
Sustainable Agriculture	
Research and Educ. Prog.	7 U.S.C. 5811
Extension Activities	
Smith-Lever Act	7 U.S.C. 341 et seq.

I. National Training Program in sustainable agriculture

CSREES - Extension Activities

Smith-Lever Act	7 U.S.C. 341 et seq.
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J. The National Genetics resources program

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Hatch Act	7 U.S.C. 361a-361i
National Research Initiative	7 U.S.C. 450i(b)

K. Food safety

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Hatch Act	7 U.S.C. 361a-361i
Evans-Allen Program	7 U.S.C. 3222
Animal Health and Disease Research, Section 1433	7 U.S.C. 3195
Special Research Grants	7 U.S.C. 450i(c)
National Research Initiative	7 U.S.C. 450i(b)

L. Integrated pest management research

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Hatch Act	7 U.S.C. 361a-361i
McIntire-Stennis Cooperative Forestry	16 U.S.C. 582a-7
Evans-Allen Program	7 U.S.C. 3222
Animal Health and Disease Research, Section 1433	7 U.S.C. 3195
Special Research Grants	7 U.S.C. 450i(c)
Rangeland Research	7 U.S.C. 3336(a)
National Research Initiative	7 U.S.C. 450i(b)
Sustainable Agriculture Research and Educ. Prog.	7 U.S.C. 5811

M. Selected programs authorized in Section 1672

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and EducationSpecial Research Grants:

Beef Fat Content, Iowa	Section 450 (i)(c)
Aflatoxin Research, Illinois	Section 450 (i)(c)
Taxol Cultivation, CT	Section 450 (i)(c)

N. Global change research

ARS - Authority to conduct these research programs in ARS are contained in the Department of Agriculture Organic Act of 1862 (7 U.S.C. 2201, 2204), and the Research and Marketing Act of 1964 as amended (7 U.S.C. 427, 1621).

CSREES - Research and Education

Special Research Grants	7 U.S.C. 450 (i)(c)
National Research Initiative	7 U.S.C. 450i(b)

Economic Research Service	17 U.S.C. 1622
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Natural Resources Conservation Service - Public Law 74-46 (April 27, 1935)(16 U.S.C. 590a-f). The Agricultural Appropriation Act of 1896, March 2, 1895; Public Law 89-560 (September 7, 1966)(42 U.S.C. 3271-74)

Forest Service	Global Change Research Act of 1990, Public Law 101-606 (15 U.S.C 2931)
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QUESTIONS SUBMITTED BY SENATOR KERREY
SUSTAINABLE AGRICULTURE

Question: As part of the Sustainable Agricultural Research and Education program, a special technology development and transfer initiative has been funded in fiscal years 1994 and 1995. Funding was to be used to establish training consortia and a variety of training projects in each of the four Extension regions. All funding was to be awarded on a competitive basis. As with the basic SARE program, farmers are to be intensively involved with the program. In addition, the original legislation called for participation in this program by field staff from what is now the Natural Resources Conservation Service --NRCS-- and the Consolidated Farm Service Agency --CFSA--.

I believe this program has great merit and could be a key to helping refocus the work of both Extension and other USDA technical assistance and information providers.

Can you inform us of the progress being made with this initiative? What is your current timeline for achieving the goals of the training portion of this program? Are NRCS and CFSA personnel being fully integrated into this program, and are any funds being contributed by either of these two agencies?

Answer: During fiscal year 1995 the States are involved in planning their sustainable agriculture training programs. Initial strategic plans are due May 1, 1995. Training program implementation will vary, but is expected to take one to three years. Personnel from NRCS and CFSA have been involved in strategic planning activities and have provided in-kind support to the SARE program.

Question: I assume the same commitment to involving farmers in all aspects of the program is being followed with the funding through Extension for the technology development and transfer initiative. Is that correct?

Answer: Farmers and ranchers are involved in several ways with the Extension effort. They sit on the regional technical and administrative councils that make recommendations on Extension funding. They also participate in providing and planning local Extension programs.

Question: Can you tell us in brief the philosophy of the SARE program regarding farmer participation and the scope of such participation. Also, what has been the level of interest in, and the results from, the producer-initiated grants?

Answer: The philosophy of the people in the SARE program has been that producers should be involved in every part of the process. This includes helping determine program priorities, recommending proposals, participating in individual research projects, and helping plan extension and outreach. Producers are full partners in the program. The producer initiated grants, which provide funds directly to producers for research and demonstration projects, have generated tremendous response. Hundreds of farmers have written proposals, and dozens have been funded. Each producer that is funded must provide an outreach effort on their work to other producers, which broadens overall involvement and impact of the program.

Question: If this aspect of the SARE program has been successful, why is it not followed in other major special and competitive grants programs within CSREES? Are there any other programs within CSREES with the same level of commitment to bringing end users, the farmers and ranchers, into the priority setting process, putting them on research teams, and using them to help communicate usable results? As reorganization is being implemented, is serious consideration being given to using the SARE model for additional units within CSREES?

Answer: The first producer initiated grants were started in fiscal year 1992. It is not possible to state at this point in time the success level of this approach. Farmers and ranchers participate on Advisory Boards and help set priorities. They are also active communicators of useable results. Farmers and ranchers interact closely with the land-grant universities in helping set priorities for research and extension programs supported with Federal funding at these universities.

QUESTION SUBMITTED BY SENATOR JOHNSTON

CSRS RESEARCH GRANTS

Question: Several critical CSRS research projects are being conducted in Louisiana in a variety of areas such as aquaculture, tillage, silviculture, and waste management. Does CSRS consider these projects to be a high priority?

Answer: These special research grants were not proposed for funding in fiscal year 1996. Due to budget constraint funds were only requested for selected high priority National interest special research grant programs. Due to the discretionary nature of the Hatch Act and related formula based programs, amounts allotted to State institutions permit the institutions to fund research in those areas that they identify as high priority. This flexibility could provide for maintaining these programs if the state institutions wishes to continue the research.

NATIONAL AGRICULTURAL STATISTICS SERVICE
QUESTIONS SUBMITTED BY SENATOR COCHRAN

DISTRIBUTED PROCESSING AND COMMUNICATIONS SYSTEM

Mr. Cochran. The fiscal year 1996 request for the National Agricultural Statistics Service proposes an increase of \$1.1 million for the two-year cost of upgrading its distributing list and surveys processing system and communications network. Does this represent the full cost of these planned systems enhancements? If not, what additional funding will be required? What savings in operating expenses are anticipated in future years from this proposed investment?

Mr. Bay. While the requested funds will total \$2.2 million--\$1.1 million in FY 1996 and in FY 1997--the full cost to complete the system will be around \$3.5 million. Since NASS will cover the \$1.3 million shortfall with funds directed to this project that are already in its base, no additional funding will be needed. When the system is fully implemented in FY 1998, NASS expects to save about \$400,000 per year.

PESTICIDE USE DATA

Mr. Cochran. The fiscal year 1996 request includes an increase of \$3.3 million and 18 staff years for pesticide use data and an increase of \$3 million and 13 staff years for integrated pest management and restricted use pesticide data collection. Would you please give us a status report on your present data collection and survey efforts in these areas and what the future requirements will be for this work.

Mr. Bay. The NASS Pesticide Data Program currently includes agricultural pesticide use surveys for fruits and vegetables. The following fruits and vegetables are covered: apples, apricots, avocados, blackberries, blueberries, cantaloupes, sweet and tart cherries, dates, figs, grapefruit, grapes, honeydews, kiwi fruit, lemons, limes, nectarines, olives, oranges, peaches, pears, plums, prunes, raspberries, strawberries, tangelos, tangerines, temples, watermelons, asparagus, broccoli, cabbage, carrots, cauliflower, celery, cucumbers, eggplant, green peas, lima beans, dry onions, bell peppers, snap beans, spinach, sweet corn, tomatoes, and lettuce. The fruit pesticide surveys are conducted in odd years and the vegetable surveys in even years.

The following States are surveyed: Arizona, California, Florida, Georgia, Illinois, Michigan, Minnesota, New Jersey, New York, North Carolina, Oregon, Pennsylvania, South Carolina, Texas, Washington, and Wisconsin. These States account for 80-85 percent of the total U.S. fruit and vegetable acreage.

The requested funding increase of \$3.3 million will allow NASS to collect and publish additional on-farm pesticide data for the commodities and States that follow. The expanded program is similar to the current program in which the States and commodities will be rotated each year to double the total coverage. The additional commodities for the 2-year rotation are: alfalfa, almonds, barley, collards, kale, limes, mustard greens, oats, other hay, peanuts, pecans, popcorn, pumpkins, radishes, rice, sorghum, squash, sugar beets, sugarcane, sweet potatoes, turnip greens, and walnuts.

The States that will be surveyed for the additional commodities and for on-farm usage include: Alabama, Arizona, Arkansas, California, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Virginia, Washington, and Wisconsin.

NASS will also collect and publish post-harvest pesticide use data for apples and potatoes that have left the farm for California, Colorado, Idaho, Maine, Michigan, Minnesota, New York, North Dakota, Oregon, Pennsylvania, Virginia, Washington, and Wisconsin.

For the Integrated Pest Management (IPM) and Restricted Use Pesticides, NASS is currently publishing an annual report which shows only the restricted use pesticides for selected crops currently included in NASS's pesticide use surveys.

The \$3.0 million for the IPM and Restricted Use Pesticide Initiative would enable NASS to collect national level data on IPM practices and pesticide use on all crops, livestock, farm roadsides, nurseries, greenhouses, and pastures, and would target all types of farms across the United States. Statistically valid data would be available to evaluate the progress of the adoption of IPM practices by farmers throughout the United States, regardless of the crops they grow or the livestock they produce. None of this information is currently available. The data collected through the Restricted Use Pesticide Initiative would also meet the requirements of Section 1491 of the Food, Agriculture, Conservation, and Trade Act of 1990. Together the two survey programs would complement each other and produce an extensive data base of information that would help answer pertinent questions related to pesticide use in the United States.

At this time NASS does not anticipate the need for any additional funds for pesticide use surveys, if Congress appropriates the full amount of the current request.

EAS REORGANIZATION

Mr. Cochran. The USDA explanatory notes on the fiscal year 1996 budget indicate that the economic analysis staff functions have been transferred from the Economic Research Service (ERS) and the National Agricultural Statistics Service (NASS) to Executive Operations, pursuant to a memoranda issued by the Secretary in September and October of 1994. Why have these functions been transferred from these agencies to Executive Operations?

Dr. Horn. Prior to the 1994 reorganization of USDA, the responsibility for economic research and analysis rested with the Assistant Secretary for Economics. The duties of the Assistant Secretary included the responsibility to advise the Secretary of Agriculture on economic policy issues. A small staff agency, the Economic Analysis Staff (EAS), supported the Assistant Secretary by providing economic analyses of sensitive economic policy issues. The reorganization legislation (Public Law No. 103-354) abolished the Assistant Secretary for Economics position. In October 1994 the Secretary of Agriculture established the subcabinet position of Chief Economist. The Office of the Chief Economist appears within Executive Operations on USDA's organization chart, along with the Office of Budget and Program Analysis, the National Appeals Division, and the Office of Small and Disadvantaged Business Utilization. It is in this context that economic analysis staff functions are found within Executive Operations.

The Office of the Chief Economist is assigned many of the functions formerly assigned to the Assistant Secretary for Economics. The Office advises the Secretary on policies and programs affecting U.S. agriculture and rural areas, including assessments of USDA program proposals, legislative proposals, and general economic developments that have implications for agriculture and rural areas. The Chief Economist directs the Office of the Chief Economist, the Office of Risk Assessment and Cost-Benefit Analysis, and the World Agricultural Outlook Board and is responsible for preparing economic analyses of USDA's principal initiatives. The Economic Analysis Staff is wholly contained in the Office of the Chief Economist and no longer exists as a distinct entity.

The functions of the Economic Research Service (ERS) and the National Agricultural Statistics Service (NASS) have not been transferred to Executive Operations. ERS and NASS, whose Administrators reported to the Assistant Secretary for Economics prior to reorganization, now report to the Under Secretary for Research, Education, and Economics.

SUBCOMMITTEE RECESS

Senator COCHRAN. Our next hearing will be held here in this room on Wednesday, April 26 at 10 a.m. We will hear from Department witnesses on the budget request for the Department's Food, Nutrition, and Consumer Services programs. Until then, the subcommittee stands in recess.

[Whereupon, at 12 noon, Wednesday, April 5, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, May 3.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

WEDNESDAY, MAY 3, 1995

**U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.**

The subcommittee met at 10 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Burns, Bumpers, Kerrey, and Kohl.

DEPARTMENT OF AGRICULTURE

OFFICE OF THE SECRETARY

STATEMENT OF DAN GLICKMAN, SECRETARY OF AGRICULTURE

ACCOMPANIED BY:

RICHARD ROMINGER, DEPUTY SECRETARY

STEPHEN B. DEWHURST, BUDGET OFFICER

OPENING REMARKS

Senator COCHRAN. The subcommittee will please come to order. Today we are continuing our hearings on the fiscal year 1996 budget submitted by the President for Agriculture, Rural Development, and Related Agencies.

This morning we are very pleased to have the Secretary of Agriculture, Dan Glickman, as our witness. We welcome you to the hearing, and we appreciate the fact that this is your first appearance before this subcommittee.

We have a copy of your statement, Mr. Secretary, and we will make that a part of the record in its entirety. We would encourage you to make whatever summary comments you would care to.

I should advise the subcommittee and all who are here that we are going to have a series of votes on the floor of the Senate this morning under a previous order entered last evening. Those votes will begin at 11:15 a.m.

It is my hope that we can conclude the hearing by then so we will not have to interrupt it and come back after the votes. That would be an imposition, I am sure, on the Senators as well as the Secretary and others.

But if it is necessary, my intention would be to continue the hearing on another date that would be mutually convenient with the Secretary and the subcommittee.

FARM PROGRAM PROPOSALS

For the purpose of getting us started, let me just make a couple of observations, one of which is that the President, when he submitted the budget, did not set forth any specific recommendations for farm program changes, although the budget presumes substantial reductions in outlays for the Commodity Credit Corporation for the period 1998 to the year 2000.

So, over a 3-year period, the presumption is that there would be a decline of \$1.5 billion in the outlays for farm program costs.

I am curious to know, Mr. Secretary, if you can tell us what the administration's proposals will be to achieve those cost savings in farm programs and what other changes, if any, we could expect that would have budget implications for this committee's consideration.

We know the Agriculture Committee is going to be writing the farm bill, and we are not going to presume today to undertake to answer all of the questions or issues that could arise in the writing of the farm bill.

But we do have a very keen interest and a right to know, it seems to me, what the administration's plans are, as they would affect the work of this committee in trying to project what the net realized losses of the Commodity Credit Corporation would be for future fiscal years, for example.

If you could share that information with the subcommittee, if you have it, that would be helpful.

FOOD AND NUTRITION PROGRAMS

One other item that is of fairly immediate concern is the issue of welfare reform and the effect that is going to have on food and nutrition programs administered by the Department of Agriculture.

It is my understanding that there may be a forum in my State of Mississippi next week to discuss some of these issues.

I would like to know about that and what the plans are of the administration for proposals for the Food Stamp Program, the School Lunch Program, and any other changes that we need to discuss here in our subcommittee in terms of the impact that they are going to have on our appropriations levels.

The Budget Committee, as the Secretary knows, is beginning to work now and will formally begin markup of a budget resolution very soon, and we will have it on the floor for consideration.

And while it does not specify the exact line-item levels of funding, it certainly is going to constrain the work of this committee in the decisionmaking process because it will contain certain assumptions for changes in programs that will be required of the legislative committees.

That will in an indirect way affect the flexibility that this committee has to provide funds for these programs.

So all of this is very important, in my judgment. It is very timely. And I think your presence here will help us understand better what we may be up against in terms of trying to allocate the needed funds at the program levels that we think may be necessary for both farm programs and other activities that are under the jurisdiction of the Department of Agriculture.

Having said that, I am going to yield to my distinguished colleagues on the subcommittee for any comments or opening statements that they might have. And, after that, you may proceed.

Senator Burns.

STATEMENT OF SENATOR BURNS

Senator BURNS. Thank you, Mr. Chairman. I will just put my statement in the record, because of time and everything else. I want to hear from the Secretary, but I did want to reiterate some of my concerns and then put those together.

I want to thank you for your leadership and the way you approach this, Senator Cochran, because I think—I do not know where we would be without your leadership with regard to agriculture and the appropriations process.

I am still concerned about this business of me going to the grocery store and paying \$2 a pound for bacon, and then I go home and they are getting \$35 for hogs. And I am concerned about income back to the farmer.

And I know we can come up with all kinds of examples where a person that—we heard an example the other day of a man that flies for Delta. He is a pilot. He wanted to buy a small farm just so he can hunt—so he can hunt quail.

And all at once, after he bought the farm, he had two checks show up. One was his CRP check and the other was a check for his peanuts, of which he does not—he is not in either one of those programs, or thought he was not. And everybody says that is the reason the programs should be done away with.

Well, I want to reiterate that not every farmer flies airplanes, and that there are some farmers who are trying to make a living out there off of their farms and ranches. And I do not know how to approach this.

But I know on this committee, and with your leadership, Mr. Secretary, we can find a way to do that. And I appreciate you being here this morning.

And I thank the chairman.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Senator. We will insert your statement in the record.

[The statement follows:]

PREPARED STATEMENT OF SENATOR BURNS

Thank you, Mr. Chairman, for calling this hearing today with Secretary of Agriculture. This is the first opportunity I have had to have a discussion with the Secretary on the issues which will have a large impact on the number one industry in my State of Montana. Agriculture is the leading industry in Montana, and as a result the actions taken by the Department of Agriculture have a very significant impact on the economy of the State. For although the majority of the population lives in towns and cities in the State, the indirect impact of farming and ranching reaches them ultimately.

During the Easter recess this year, Mr. Secretary, I traveled throughout Montana to hold a series of town meetings with agriculture producers. This was to get an idea of what it was that these members of my constituency wanted to see in the upcoming Farm Bill. Mr. Secretary, these citizens are concerned and they are nervous. Many feel that they are on their last legs when it comes to making a living, doing what they want to do; producing the most reliable, safest and least expensive food supply in the world.

Mr. Secretary, I am very concerned about the perception that the American public has of agriculture producers. I am concerned that the Farm Bills are written to provide inexpensive food for the Nation, at the expense of the producer. Finally, Mr. Secretary, I am concerned and upset when I go to the market and buy bacon for \$2 a pound, knowing full well that the pork producer was only getting \$35 for that hog that same day. Somewhere along the line, Mr. Secretary, somebody is making a great deal of money, while the producer is being hit hard by increases in the cost of production.

The producers in Montana have several thoughts about the future of farm programs and how they relate to the entire USDA budget. Some groups will suggest that the food assistance programs should be removed from the Department's authority. Others want to see the reductions taken in the social programs. I see the need to maintain the balance as it is in the Department today. This goes for the budget as well.

The greatest concern I found when I was in the field relates to the pricing structure of commodities. Numerous people came before me to provide me with information on the prices that they are receiving on their livestock. It appears that there are numerous questions about the way that contracts are written between the packers and the individual producer. Many of the family ranching units are concerned with the way that they are forced to meet the pricing expectations of the packers, and their cooperative feedlots.

You are new in your position, and I appreciate that you may have not had time to address all the issues that will stand before you and your Department. I wanted to share with you however some of the concerns that the people of Montana have shared with me. In addition, during your testimony before the Senate Energy and Natural Resources Committee I invited you to come to Montana, and I renew that invitation. I will have my staff contact yours to make arrangements.

Thank you, Mr. Chairman, and I appreciate the opportunity to listen to the testimony of the Secretary, and his assistants.

STATEMENT OF SENATOR KOHL

Senator COCHRAN. Senator Kohl, any opening?

Senator KOHL. Thank you, Senator Cochran.

I am delighted to be here with you and with the Secretary. I congratulate you on your confirmation. I think you are going to be an outstanding Secretary of Agriculture, and I am looking forward to working with you.

I would like to talk a little bit about dairy policy. And I look forward to having a chance to talk with you this morning. Thank you.

Senator COCHRAN. Thank you, Senator.

Mr. Secretary, welcome. You may proceed.

STATEMENT OF DAN GLICKMAN

Secretary GLICKMAN. Thank you, Senator. Thanks to you and Conrad Burns and Herb Kohl for your kind comments.

You referred to Deputy Secretary Rich Rominger, who is my partner in this effort. We try to do our best for the farmers and ranchers and consumers of this country. He has been very involved over the last several months in running the Department and deserves a lot of praise therewith.

And, of course, Steve Dewhurst, who, as I understand it, has testified before—has worked for how many Secretaries of Agriculture?

Mr. DEWHURST. Eleven.

Secretary GLICKMAN. Eleven. So he is going to give me a grade when I am done. And he has testified up here about 7,286 times. He is more of an expert than anybody is. And he does a tremendous job. I am going to summarize my statement in the interest of time.

AGRICULTURE—NATURAL RESOURCE/NATIONAL ASSET

It is obvious that I am going to do everything I can to preserve agriculture as a natural resource, as a national asset. Agriculture is the foundation that supports our economy.

The largest part of our gross national product is based upon agriculture and related industries. It is a success story. It is a winner for America.

We should help our winners. And our goal is to do that while recognizing the significance of the budget problems we have. But, we do not want to shoot ourselves in the foot either. We do not want to do anything that will cause this national winner to suffer damage, especially one that has seen very significant budget cuts over the last 10 years, which Agriculture has.

FARM PROGRAM PAYMENTS

We are talking about an amount for farm program payments of less than 1 percent of the budget of the United States.

It is really a small sum, considering the aggregate value-added that agriculture provides the American economy. We will get more into that later. But I think that this needs to be constantly reinforced. Value-added agriculture is a winner for America. It affects jobs and urban areas. It does not just affect farmers.

VALUE-ADDED SIGNIFICANCE

The value-added part of agriculture produces more jobs than any other single segment of the American economy. So we have got to consider that this is a national issue, not just a parochial issue in rural areas, although that is obviously a very big part of it.

We have also been going through a major reorganization, led by Deputy Secretary Rominger, which I will talk about in a few minutes. This effort will result in far fewer employees and fewer agencies.

USDA REORGANIZATION

It is a difficult process, kind of reinventing the culture of the Department of Agriculture, which is very large and has operated in virtually every county in America for a long time.

We are trying to change that and slim it down, and in the process save several billion dollars. I do not believe there is another agency of Government which is taking such an active, aggressive role in slimming down and reinventing than this Department, the Department of Agriculture.

NATIONAL RURAL CONFERENCE

The third thing I would mention has to do with the recently completed National Rural Conference. I conducted seven townhall meetings around the country, which culminated in an Ames, IA, National Rural Conference.

These conferences brought out big turnouts everywhere. Several hundred to over 1,000 in every conference. We had all sorts of participants from across the regions, across the philosophies; Liberals, Conservatives, Democrats, Republicans, people interested in commodity programs, livestock, urban interests, and the like.

The focus of each forum varied. But there were some recurrent themes, which I would mention to you as you write the appropriations bills, that may be useful to you: One, the importance of fair international trade. People want trade, but they want fair trade. That was mentioned at townhall meetings everywhere.

Rising production costs and lower payments to farmers: One of the recurrent themes of great concern is that farmers are the only group in America that buy retail and sell wholesale.

Increased integration and concentration in the agriculture economy, particularly in the livestock sector was mentioned wherever we went.

Increased small farm and business expenses; concerns that excessive taxes will prevent farmers' children from farming; the necessity of rural development programs; the need for flexibility and planting programs; simplification of farm program regulations; and research, a heavy dose of research everywhere we went was a part of the message.

In addition, there was a great deal of praise and gratitude for USDA employees. I was worried about this, traveling around the country; all of the negative feelings that you hear about Federal employees.

The conferences were held right during the middle of the tragic bombing in Oklahoma City. But what I found is most people believe that USDA employees are, in fact, doing their best to be sensible, reasonable folks in implementing the policies that the Congress and the administration come up with. I was delighted to hear about it.

1995 FARM BILL

After 18 years on the House Agriculture Committee, I obviously look forward to working together with you on both the budget and the 1995 farm bill.

Now, our 1996 budget does not contain specific farm bill proposals, Senator. I will probably be giving those next week, when the testimony before the House and Senate Agriculture Committees start.

But you do know that we have proposed \$1.5 billion in reductions in the Commodity Credit Corporation outlays in the 3-year period 1998 to the year 2000, to be derived during the farm bill process.

I will talk about some ideas, where we can achieve those more specifically next week.

1996 BUDGET PROPOSALS

Today, I would like to focus on our 1996 budget proposals. Even though I was not involved in developing the budget, I am fully supportive of it. Deputy Secretary Rominger was the point person for doing that.

The budget proposals continue the emphasis on fiscal discipline and reflect a commitment to create a Government that meets new challenges instead of serving old interests, a Government that is smaller and more effective.

And as I said, we will achieve our goal by streamlining USDA to work better and to cost less.

MANDATORY ENTITLEMENT PROGRAMS

USDA's budget is dominated by a relatively small number of large, mandatory entitlement programs that have grown relatively faster than the majority of USDA's discretionary programs.

Approximately 75 percent of the budget is classified as mandatory, 25 percent discretionary. The highlights of the request are as follows:

No. 1, the budget proposes \$62.3 billion in outlays for fiscal year 1996, nearly the same level as the current estimate for fiscal year 1995, of which \$46.6 billion would be for mandatory spending and \$15.7 billion for discretionary spending.

PROPOSED SAVINGS

Savings resulting from our ongoing reorganization and streamlining efforts are incorporated in the budget. The number of USDA agencies have already been consolidated from 43 to 29, and we are closing nearly 1,200 field offices and establishing more efficient service centers for one-stop shopping.

As a result of these efforts, the Department's Federal employment will be reduced by more than 13,000 staff-years over the 1993 through 1999 period.

We have already eliminated 5,000 staff-years through attrition and buy outs. We estimate that this will result in \$4 billion in personnel costs savings and administrative costs savings by the year 1999.

DECLINE IN FARM PROGRAM PAYMENTS

On farm program payments, spending for CCC farm price and income support programs is projected to decline from \$10.6 billion in 1995, this year, to \$9.1 billion in 1996, reflecting expectations of a return to normal yields and the elimination of disaster payments.

Based on current law, there is a further decline projected to \$6.4 billion by the year 2000.

Now, that is a very significant drop of about 10 to 15 percent per year, based upon current law, with no major changes.

Senator BUMPERS. Mr. Secretary, did you say drop by that amount or to that amount?

Secretary GLICKMAN. I am sorry. To that amount. Excuse me. To \$6.4 billion. Obviously, that is a factor determined by a lot of things, world trade, weather, other things beyond the Department's control. But that is based upon the projections as we have them now.

Thus, the appropriations by this committee to cover net realized losses incurred by CCC should also be declining.

CCC budget estimates reflect the continuing impacts of the 1985 and 1990 farm bills, as well as Budget Reconciliation Acts. Budget estimates also reflect recent trade agreements, NAFTA, GATT, as well as administrative actions to extend CRP contracts.

CROP INSURANCE REFORM PROGRAM

Full funding is proposed to continue the implementation of the Crop Insurance Reform Program enacted last fall. Under the new

program, about 80 percent of the Nation's producers will be protected against catastrophic losses.

Producers will also have the opportunity to buy higher levels of coverage. Producers of noninsurable crops will also be eligible for payment assistance.

INTERNATIONAL PROGRAMS

The President's budget also provides for an aggressive agriculture export policy. It proposes fully funding and adhering to the administration's so-called greenbox commitment to increase the program levels of USDA export promotion and related programs by \$600 million over the next 5 years.

The budget includes a total program level of over \$8 billion for the Department's international programs in 1996.

CONSERVATION PROGRAMS

The budget also reflects continued investment in the environment. Funding for the CRP and the Wetlands Reserve Program would increase by over \$300 million from 1995 levels, reflecting a proposed enrollment of 300,000 additional wetland acres and the recently announced modifications and extensions of CRP contracts.

Also in the conservation area, there is a proposal to refocus the Watershed Construction Program and to continue funding of technical assistance activities to help farmers implement their conservation plans.

RURAL DEVELOPMENT

This was a high priority in our rural conferences, technical assistance to producers, cooperative assistance, working together. And we think those need to be funded.

The budget also gives priority to rural development. A substantial increase is requested for water and waste disposal grants to support the Water 2000 initiative. The Rural Electric and Telecommunications Programs would be maintained at levels at least as high as intended in the 1995 Appropriations Act. The budget will also provide assistance for over 100,000 housing units.

In a new proposal, most rural economic and community development programs would be converted to a \$1 billion performance partnership initiative to be managed in consultation with State and local officials, State rural development councils, and other organizations and entities.

I might also mention parenthetically that in the Iowa conference the President repeatedly reinforced his commitment to expand rural development initiatives and defined new sources of capital, particularly sources that could develop private sector capital, seed money from the Government, or else direct lending authority.

We expect in our farm bill proposals to further augment those rural development initiatives that had been in this particular budget proposal.

MEAT AND POULTRY INSPECTION

We also know that we have a safe and wholesome food supply, that continued improvements in food safety have been and will con-

tinue to be a high priority. This budget includes additional funding for critical in-plant meat and poultry inspection vacancies and for the scientific effort to reduce pathogens.

We are also reproposing legislation to collect user fees for providing meat and poultry inspection service beyond an approved primary shift to correct existing inequities in the way the industry is charged for overtime inspection and accommodate the need for increased investment in food safety.

Legislation has been submitted to the Senate and House Agriculture Committees to authorize these fees, which would have the effect of asking industry to pay for about 28 percent of the program.

FOOD AND NUTRITION PROGRAMS

The budget does not propose major programmatic changes to the Food Stamp Program or the Child Nutrition Program. However, the reform of the Food Stamp Program is underway to improve program integrity and modernize benefit delivery.

This will include increased penalties for recipients and stores that abuse the program, helping States set up an electronic benefits transfer system, and different ways to prevent fraud and abuse. Those proposals have been submitted to Congress, at least in a partial way.

Further efforts are underway to get States to make more precise benefits determinations and to cut payment error from their current levels. We also propose a \$350 million increase in the WIC Program, because we believe that it is needed very desperately.

AGRICULTURAL RESEARCH

I want to talk for a moment about agricultural research. The budget for research reflects the need to target these programs to our most urgent priorities in this time of fiscal restraint.

Total funding for the agencies dealing with research is to be reduced by about \$60 million from the 1995 level to a level of about \$1.8 billion.

Within this total, funds are requested to provide the research and educational support our producers need to help achieve the administration's objective of applying integrated pest management techniques on 75 percent of America's crop acreage by the year 2000.

Priority is also given to food safety and human nutrition. Basic support for university research and extension through formula grants is maintained, and there is a small increase in competitive grants funded under the National Research Initiative.

Savings would be achieved through the closure of 12 additional ARS laboratories and through reductions in lower priority grant programs.

In the marketing and regulatory area, the budget proposes overall funding roughly comparable to the 1995 level to deal with issues such as development of organic standards, expanded monitoring of the use of pesticides, border inspections for plants and animals, and improved financing of emergency operations.

INFOSHARE

In the management area of the Department there is a very important initiative called InfoShare that is designed to provide improved information resources management and communications at less cost in USDA's county-based service centers.

WAYS TO ACHIEVE SAVINGS

Let me just close by saying—because I think you need an answer to your question about where we would come up with the money for—even the \$1.5 billion, if proposed. The budget does talk about ways to achieve that. One way is to increase the flex or nonpayment acres, perhaps from the current level of 15 to 17.5 percent. That would provide about \$0.5 billion over a 3-year period.

One way is to put a means test—make producers over \$100,000 of off-farm income ineligible for payments. That was proposed before by the previous administration, and would raise about \$300 million.

So there is some discussion about maybe increasing assessments on some price-supported commodities, the possibility of eliminating or reducing the 0-50-85 payment provisions.

Clearly, saving \$1.5 billion cannot be done without some pain. But I think we could find a way to get that additional \$1.5 billion without having a major disruptive effect on the agricultural sector.

But, you know, if we are talking about increments of 10 times that amount, or whatever, it would obviously have great, great dramatic effect.

And that could really only be achieved by, frankly, either major reductions in the target price programs or major increases in nonpayment acreage. It would be hard to achieve these savings without doing one of those two things.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Secretary Glickman. We have your complete statement, and it will be made part of the record. [The statement follows:]

PREPARED STATEMENT OF DAN GLICKMAN

Mr. Chairman, Members of the Committee, it is indeed a privilege to appear before this Committee as the Secretary of Agriculture to discuss the 1996 budget for the Department of Agriculture.

Today, I would like to focus on our 1996 budget proposals. I should make it clear at the outset, that while I have not been involved in the process of developing the 1996 budget, it has my full support. Deputy Secretary Rominger was the point person for the Department in working with OMB to develop the budget and he is with us today.

On February 6, President Clinton submitted the 1996 budget to the Congress. It continues the emphasis on fiscal discipline and the reduction of the Federal deficit. Increases are targeted to areas to build a stronger economy for all of our citizens. Before I discuss the specifics of the 1996 request, I would like to provide some background for you on the makeup of the Department's budget.

USDA's budget is dominated by a relatively small number of large mandatory entitlement programs that have grown relatively faster than the majority of USDA discretionary programs. Of the roughly \$60 billion in outlays for the Department, approximately 75 percent is classified as mandatory spending, with 25 percent in the discretionary category.

Domestic nutrition assistance programs comprise about 60 percent of the budget, farm program spending including the Conservation Reserve Program make up less

than 20 percent and the balance of funds are devoted to a wide range of largely discretionary programs including rural development, soil conservation, marketing and regulatory programs, food safety, research and forestry. This current distribution is the result of a number of trends over the past few decades, including the expansion of food assistance programs over the last 20 years and more recent legislative efforts to reduce farm support programs from the high levels reached in the mid-1980's.

The Administration's proposed fiscal year 1996 budget for the Department of Agriculture emphasizes fiscal responsibility; saving hundreds of millions of dollars through reorganization while at the same time making important investments in our country's future. The budget proposes \$62.3 billion in outlays for fiscal year 1996, the same level as the current estimate for fiscal year 1995.

USDA is at the forefront of the Administration's commitment to a more responsible government, a government that works better and costs less. The Department's fiscal year 1996 budget was developed with the goal of spending less and investing more. This budget reflects USDA's commitment to downsizing and streamlining, providing an abundant and wholesome food supply at reasonable prices, and sustaining a solid economy that provides opportunity for growth and prosperity for our farmers and ranchers and others living in rural America.

On October 13, 1994, the Department of Agriculture Reorganization Act of 1994 was signed into law. This Act was based on the Administration's proposed legislation to restructure the Department along mission lines. Under the reorganization, USDA agencies are reduced from 43 to 29 and administrative support units are consolidated for each mission area. Along with the headquarters restructuring, actions are under way to restructure the field offices over the next several years. USDA one-stop Field Office Service Centers will be established as 1,166 field offices are closed or consolidated. When the establishment of the Centers is complete, USDA customers will be served through about 2,500 locations housing the Consolidated Farm Service Agency and the Natural Resources Conservation Service. In addition, other agencies may also be collocated in the Centers. Field structures of other agencies are also being streamlined to better meet the needs of customers and reduce costs.

As part of the reorganization and streamlining efforts, the Department's Federal employment will be reduced by over 13,200 staff years and non-Federal employment by over 1,100 staff years by 1999. By 1999 the Department will achieve savings of \$2.8 billion in personnel costs and \$1.3 billion in other administrative costs for a total savings of \$4.1 billion.

At the same time, as part of the President's Reinventing Government Initiative, all Federal agencies are reexamining their mission. This includes: addressing the mission based on "customer" input; asking whether the mission could be accomplished as well or better without Federal involvement; looking for ways to cut costs or improve performance through competition; and ways to put customers first, cut red tape, and empower employees. We are actively participating in this effort and will be keeping this committee fully apprised of our review.

FARM AND FOREIGN AGRICULTURAL SERVICES

Consolidated Farm Service Agency

The establishment of the Consolidated Farm Service Agency (CFSA) is a major component of the reorganization and streamlining initiatives of the Department. CFSA merges programs and staffs serving farmers through county offices and combines the farm credit programs of the former Farmers Home Administration (FmHA), the Federal Crop Insurance Corporation (FCIC), and the former Agricultural Stabilization and Conservation Service (ASCS), except for some conservation programs. The Conservation Reserve Program (CRP), Agricultural Conservation Program (ACP), and Emergency Conservation Program (ECP) are retained in CFSA. Other former ASCS conservation programs are combined with the former Soil Conservation Service (SCS) to form the Natural Resources Conservation Service (NRCS).

In terms of total resources, CFSA is a large agency since it will administer a total program of \$3.2 billion in farm credit loans, a \$2.1 billion crop insurance program, as well as the domestic price and income support programs of the Commodity Credit Corporation (CCC) which represent about \$16.9 billion in total domestic program activity before receipts from price support loan repayments are deducted.

The consolidation of services into one agency with farm-oriented clientele will provide administrative efficiencies through economies of scale and reduced overhead. And perhaps more important is that with the establishment of CFSA we can improve services to farmers. The establishment of Field Office Service Centers which collocate CFSA with NRCS and other agencies will streamline our field structure

and provide farmers with one-stop service. We are currently in the process of implementing this phase of the reorganization. The budget proposes \$1.0 billion for administrative support for CFSA. This represents a small increase over the 1995 level to cover additional costs of implementing the new crop insurance program.

Farm Credit Programs

The 1996 budget maintains the farm credit programs at about the same levels as appropriated for 1995, and reflects the strong emphasis on unsubsidized guarantees of private sector loans. Since 1987, more guarantees than direct loans have been provided under these programs. Guarantees have the advantages of including private lenders in the loan-making process, and placing the primary responsibility for servicing on the lender who makes the loan. They also represent very little cost to the Government.

Guarantees, however, cannot fully replace direct loans for all of the farmers currently eligible for our loan programs. Beginning farmers and members of socially disadvantaged groups, in particular, may not have access to a private lender who is willing to make them guaranteed loans. Moreover, there are about 120,000 existing direct loan borrowers, and some of these borrowers require additional credit in order to stay in business. Until they are ready to graduate to private credit, direct loans are needed to properly service their accounts. The interest subsidy on direct loans makes these loans more affordable for limited resource producers.

The 1996 budget provides for \$70 million in direct farm ownership loans and \$543 million for direct farm operating loans. The amount budgeted for direct farm operating loans is somewhat higher than the \$500 million appropriated for 1995. The Administration recognizes the demand for these loans is likely to exceed the budgeted amounts. There is, for example, a substantial backlog of requests for direct farm ownership loans. However, increases in direct loan authority is contrary to established policy of shifting to guaranteed loans.

For guaranteed loans, the budget includes \$541 million for unsubsidized farm ownership loans, and \$1.9 billion for farm operating loans (\$1.7 billion unsubsidized and \$200 million subsidized).

The budget also provides for \$45 million in credit sales of farm properties. Such sales were not provided for in the 1995 Appropriations Act. As a result, the Department has not been able to meet statutory mandates that certain applicants, including former owners and operators and members of socially disadvantaged groups, be given a priority in the sale of property acquired through foreclosures and other such actions. Because of the backlog of applications, and the limited amount of funding available for the regular farm ownership program, it has been difficult to use that program to make these sales. Therefore, we are requesting separate funding for 1996.

Risk Management

Legislation enacted last fall to reform the crop insurance program is being implemented for the 1995 crop. Under the new program, producers can obtain at no cost, except for a processing fee of \$50 per policy, catastrophic (CAT) coverage, which guarantees them 50 percent of normal yield, valued at 60 percent of market price. Producers may also buy-up, in which case the Government subsidizes the premium at a level equivalent to a CAT coverage increased from 60 percent to 75 percent of market price, and pays all the delivery costs. CAT coverage is available either through a USDA Field Service Center or a private insurance company, while buy-up coverage is available only through a private insurance company. CAT coverage is required in order to participate in the Department's price support, certain conservation, and farm credit programs. It is anticipated that approximately 80 percent of the producers for whom CAT coverage is offered will participate in the program. Insurance will be offered for all price support crops and about 150 specialty crops and varieties.

Where CAT coverage is not available, producers will be eligible for non-insured assistance payments (NAP). Under NAP, producers will also be guaranteed 50 percent of production at 60 percent of price. However, payments will be made only when there are area-wide (usually a county or more, but not necessarily limited to county borders) losses of 35 percent or more.

For 1996, the budget provides full funding for continuation of the program into the 1996 crop year. Under the new program all costs for 1996, except Federal salaries and expenses, are treated as mandatory spending. The reform legislation does, however, subject this spending to the appropriation process. Accordingly, the budget requests that "such sums as necessary" be appropriated. Such an appropriation, rather than a specific amount, would avoid the risk of underestimating certain program costs, particularly indemnities, which are subject to variations in weather and

other conditions. We are also requesting \$88 million within the CFSA salaries and expenses appropriation to cover Federal salaries and expenses for crop insurance program activities.

Conservation Programs

The Conservation Reserve Program (CRP) is the major conservation program administered by CFSA. CRP offers producers annual rental payments, usually for a 10-year period, to remove highly erodible cropland and other environmentally sensitive land from production. Participants also receive cost-share help to establish cover. A total of about 36.4 million acres has been enrolled in the program since it was initiated in 1986. The program has produced significant environmental and economic benefits and its continuation is one of the Administration's top priorities.

On April 24, 1995, I announced details on how the Department will implement several changes in CRP that would improve the program's targeting and flexibility. These changes, which were initially made public in August and December 1994, will center around three actions. First producers with contracts expiring on September 30, 1995, will have the option to extend their contracts for one year. Second, producers not opting for the one-year extension will be able to prepare seed beds 2 months earlier than currently allowed in the CRP contract in order to plant a fall crop. This would be important in areas where summer fallow rotations are used or in other arid areas where participants may need an earlier date in order to conserve much-needed moisture. The third change will make most CRP acreage eligible for removal under a one-time "early-out" option. This early release will enable the Department to retarget the CRP by replacing existing acreage which is released early with more environmentally sensitive acres under new 10-year contracts. This will also contribute significantly toward strengthening commodity prices and farm income.

The budget request reflects these changes as well as our intention to hold an additional signup in the first quarter of fiscal year 1996 in order to reach 38 million acres by December 31, 1995, as statutorily mandated. The Department estimates that 4 to 5 million acres will accept the early release option and that 70 percent of existing contracts will be extended. These assumptions are consistent with results of previous surveys of CRP participants coupled with the anticipation that the announced provisions for reevaluation of current CRP rental rates and for modification of acreage under contract will encourage extensions.

Rules governing the "early-out" and acreage replacement options will be published in the Federal Register shortly. Sign-up dates for the various options and new enrollments will also be announced in the near future.

CFSA also provides cost sharing to landowners to restore and protect agricultural land and water resources under the Agricultural Conservation Program (ACP) and to assist in rehabilitating farmland damaged by natural disasters under the Emergency Conservation Program. Funding for the ACP program is proposed at reduced levels for 1996.

Commodity Programs

Domestic farm commodity price and income support programs are administered by the Consolidated Farm Service Agency (CFSA) and financed through the Commodity Credit Corporation (CCC).

CCC outlays are highly variable and difficult to estimate. The variability in outlays reflects the intended role of CCC programs to blunt or offset the effects of wide fluctuations in agricultural commodity markets on farm income and commodity prices. Outlays are difficult to estimate since they are heavily influenced by weather and other uncertain events affecting commodity prices during the 2-year period between preparation of the budget estimates and compilation of actual outlays at the end of the fiscal year. The current 1996 budget estimates for CCC, for example, largely reflect supply and demand conditions for the 1995 crop, most of which has not yet been planted.

Since commodity program outlays are so variable, it is difficult to predict actual outlays and to appropriate funds in advance in amounts which correspond to actual needs. Therefore, CCC borrows funds from the U.S. Treasury and repays these borrowing, with interest, from receipts and from annual appropriations provided by Congress to reimburse CCC for any net realized losses. The CCC outstanding borrowing from Treasury may not exceed \$30 billion.

Because of the year-to-year variability, average outlays over a longer time period may be a better indicator of trends in farm program spending than year-to-year comparisons. Average annual CCC outlays are currently projected to decline from \$16 billion for the period 1986-1990 to \$11 billion for the period 1991-1995, and to less than \$8 billion for the period 1996-2000, with no change in current law.

The decline in outlays reflects program reforms included in the Food Security Act of 1985 such as target price reductions as well as reductions in payment acres, increased marketing assessments, and other provisions of the Food, Agriculture, Conservation, and Trade Act of 1990 and the Omnibus Budget Reconciliation Act of 1990. Spending has also been reduced by legislation in 1993 to phase out the wool and mohair program and provisions in the 1993 budget reconciliation legislation to lower export program expenditures and reduce payments on land idled under annual conservation programs. Changes also include shifts in funding from CCC to direct appropriations for activities such as certain administrative expenses. Other reductions and changes include elimination of CCC ad hoc disaster payments in the out-years as a result of crop insurance reform which will substitute lower cost crop insurance coverage for ad hoc disaster payments.

Budget estimates for the out-years also reflect significant growth in demand for farm products from expanding the use of ethanol, as well as recent enactment of legislation implementing the North American Free Trade Agreement and the GATT Uruguay Round Agreement on Agriculture. Finally, additional signups and extension of existing contracts under the Conservation Reserve Program, in addition to beneficial environmental impacts, will contribute to stronger crop prices and reduced spending for price and income support programs.

The effect of the CRP announcement has been to lower CCC outlays by keeping this acreage out of agricultural production and increasing market prices. Over the 1998-2000 period, CCC outlays are roughly 25 percent lower annually than they would have been had the CRP not been extended. Overall, about three quarters of the increase in CRP outlays were offset by reductions in CCC outlays.

While these budget and program initiatives have reduced spending for CCC programs, outlays for the programs remain subject to fluctuations that are impossible to predict or control with certainty. However, the inability to predict the exact level of program outlays for a given period does not alter the conclusion that CCC program outlays have been substantially reduced by the reforms legislated over the past several years. Actual and projected CCC outlays are considerably less than what they would have been had the policies of the early and mid-1980's continued without modification.

For the near term, CCC net outlays are projected in the 1996 budget to increase slightly from \$10.3 billion in 1994 to \$10.6 billion in 1995, and then to decline to \$9.1 billion in 1996. Further reductions are projected in the out-years bringing CCC outlays down to \$6 billion by the year 2000. In 1995, the higher outlays for feed grains due to the record crop yields in 1994 are largely offset by lower outlays for the cotton program and for disaster assistance. For 1996, the projected decline in outlays reflects lower costs for the feed grain program as yields in 1995 are estimated to return to more normal levels, as well as reduced spending for ad hoc disaster assistance as crop insurance reform is implemented effective with the 1995 crop.

Baseline estimates for 1996 also reflect proposed appropriations language to reduce spending by \$60 million by prohibiting assistance to livestock producers under the Livestock Feed Programs on losses for which coverage is available under the new crop insurance program.

The budget for fiscal year 1996 does not include 1995 Farm Bill proposals for the commodity price and income support programs. However, the President has recommended a small reduction of \$1.5 billion in CCC outlays to be taken over the 3-year 1998-2000 period. Specific measures to achieve these targeted savings will be proposed at a later date.

International Trade and Export Programs

Export expansion remains among the Administration's highest priorities. Over the past year, the Department continued its vigorous pursuit of new overseas market opportunities and, I am pleased to report, we achieved some very positive results. Provisions of the North American Free Trade Agreement (NAFTA) continued to be implemented, the Uruguay Round negotiations were successfully concluded, and the administrative steps needed to implement the Uruguay Round Agreement on Agriculture this past January were set in motion. These initiatives to lower trade barriers and gain improved market access were complemented by other Department activities designed to build new trading relationships and promote U.S. agricultural products in high-growth overseas markets.

Our efforts are bearing fruit. As a result of NAFTA, U.S. agricultural exports to both Mexico and Canada were at record levels during fiscal 1994. We also set record levels of exports to Japan, Taiwan, Hong Kong, the Russian Federation, and a number of other smaller, but growing markets. Exports of high value agricultural products set another record last year and comprised almost 60 percent of total U.S. agricultural exports, up from 56 percent the previous year. These gains are continuing

this year. We are now projecting a record \$48.5 billion level for U.S. agricultural exports during fiscal 1995, an increase of \$5.0 billion or 11 percent over 1994, and \$4.7 billion above the previous record set in 1981. Moreover, this year's export gains are broad-based, with increases being registered for bulk commodities, as well as high value products.

As encouraging as these developments are, we recognize that much work remains to be done, and we will need to continue and even intensify our efforts in order to take full advantage of the market opportunities already emerging as a result of the Uruguay Round Agreement. For example, implementation of the Agreement's provisions by other countries must be closely monitored to ensure that trade liberalization commitments are being fully adhered to. Likewise, considerable effort will need to be given to the process of setting international standards, including sanitary and phytosanitary standards, and to the establishment of the new World Trade Organization and its Committees on Agriculture and Sanitary and Phytosanitary Standards. We will also need to review the Department's array of export promotion and market development programs to ensure they remain effective for meeting our export expansion goals in a more liberalized trading environment.

To continue this commitment to export expansion and build on our recent progress, we are proposing a total program level of \$8.2 billion for the Department's international programs and activities in 1996. In developing our proposals, we have adhered to commitments the Administration made during Congressional consideration of the Uruguay Round implementing legislation regarding the future operation and funding for various export promotion and related programs of the Department. One component of these commitments is an increase in the program levels for "greenbox" and other GATT consistent programs by \$600 million over a 5-year period, and our proposals provide for a series of program increases and new activities which meet that commitment, beginning in 1995.

For the CCC export credit guarantee programs, the budget includes a total program level of \$5.7 billion. Included within this program level is \$100 million for a new credit activity—supplier credit guarantees, which are being proposed as a component of the Administration's "greenbox" commitment. Under this activity, exporters of U.S. agricultural commodities will be able to obtain CCC guarantees for short-term credits extended directly to foreign buyers. Supplier credit guarantees are expected to be particularly useful in facilitating sales of high value products, the fastest growing component of U.S. agricultural exports. The budget also proposes that \$100 million of facilities financing guarantees be made available in 1996. Under this activity, CCC will provide guarantees to encourage the establishment and upgrading of facilities to address infrastructure barriers to increasing sales of U.S. agricultural products.

Concerning Uruguay Round Agreement commitments, it should be noted that there is a requirement that agricultural export subsidies be reduced over a 6-year period. For the United States, reductions in the quantities of products exported under our subsidy programs will be carried out on a July-June basis, beginning next July, and the reductions in expenditures for export subsidies will be carried out on an October-September basis, beginning next October. As a result, the 1996 program levels for the Department's export subsidy programs—the Export Enhancement Program, Dairy Export Incentive Program, and Sunflower and Cottonseed Oil Assistance Programs—will reflect the first phase of these reductions. However, funding for these programs has been provided at the maximum levels which are consistent with the quantity and expenditure reduction commitments required by the Uruguay Round Agreement.

For Public Law 480 foreign food assistance programs, the budget proposes a total program level of just over \$1.0 billion in 1996. This is expected to provide for approximately 3.4 million metric tons of commodity assistance. Proposed rescissions in 1995 funding for Titles I and III are also included in the budget. The proposed reductions in both 1995 and 1996 are necessitated by constrained spending targets for U.S. international programs and the need to accommodate increased expenditures for other priority programs.

However, the budget does recommend an expansion in the Department's foreign food aid activities through the Food for Progress Program. Under this program, U.S. agricultural commodities are provided to developing countries and emerging democracies which have made commitments to introduce and expand free enterprise in their agricultural commodities sectors. As a component of our "greenbox" proposals, the budget proposes that beginning in 1995 the annual limitation on CCC funding for transportation and other non-commodity costs of Food for Progress programming be increased, which will facilitate an expansion in the level of commodity assistance we are able to provide under the program.

The Foreign Agricultural Service (FAS) has primary responsibility for administering the Department's international programs. The budget provides a total program level of \$172.8 million for FAS, of which \$129.5 million is appropriated funding. This represents an increase of almost 10 percent in appropriated funding for FAS, consistent with the Administration's "greenbox" commitment. The proposed increase will support a major expansion in the agency's overseas counselor/attaché and trade offices, as well as a number of market development and export promotion activities. These include funding for the Federal/State Market Improvement Program to provide matching grants to States to develop innovative marketing techniques for use in international markets and to improve State expertise in providing services to agricultural businesses seeking to enter export markets. The budget also includes a modest increase in FAS funding for the Foreign Market Development Cooperator Program and includes full funding for the Market Promotion Program at its authorized level of \$110 million.

RURAL ECONOMIC AND COMMUNITY DEVELOPMENT

In the Rural Economic and Community Development (RECD) area, we are proposing both substantial funding levels for the programs in this area, and legislation to provide more flexibility for tailoring program assistance to local needs.

It is important to note that the loan programs in this area are subject to the budgeting rules imposed by the Federal Credit Reform Act of 1990. The program levels are estimates of the amount of loans that can be made with given amounts of subsidy cost. These estimates are sensitive to changes in Government's cost of borrowing, as reflected in U.S. Treasury interest rates, and other factors.

In 1995, current estimates of program levels are, in many cases, substantially less than the estimates made at the time the 1995 Appropriations Act was enacted. Recent increases in Treasury rates have had a disproportionate impact on the subsidy rates for the various programs. Because the amount of subsidy appropriated for each program could not be exceeded, program levels had to be reduced.

For 1996, you will find that the budget includes significant increases in subsidy costs, just to restore some program levels to the 1995 Appropriations Act estimates. In addition, there are significant increases in the levels of other programs that do not require much additional subsidy cost.

Rural Utilities Service

For electric and telecommunication loans, the budget provides for program levels at least equal to the estimates included in the 1995 Appropriations Act. In the case of electric loans financed by the Federal Financing Bank and guaranteed by the Rural Utilities Service (RUS), there is an increase of \$100 million over the appropriated level. To support our current estimates, the budget includes about \$42 million more in subsidy cost than appropriated in 1995 (\$104 million compared to \$62.5 million). Despite the fact that most of rural America has already been electrified, and provided with basic telephone service, there is a need to upgrade and expand the systems that provide this service. Modern advances in telecommunications, for example, have opened opportunities for rural areas to compete in the global economy. But, service to these areas must accommodate the latest technology and provide access to the Information SuperHighway. Hardship loans, at 5 percent interest, will reach those borrowers who cannot afford to pay commercial rates of interest. However, most loans will be made at a Treasury or municipal bond rate, and will be supplemented by private sources of credit. Based on recent experience, every \$1 of Federal funds will leverage \$3 of private funds for electric loans. For telecommunication loans, \$1 of Federal funds will leverage \$4.50 of private funds.

The budget also provides for the full privatization of the Rural Telephone Bank. This represents a significant opportunity to make good on promises to "place power in the hands of the people" and reduce the size of Government. Current law already requires privatization to begin in 1996. However, the process could take up to 40 years unless funding is provided to buyout the stock which the Government owns in the bank. The budget provides for a combination of investors' equity and Federal funding to buyout all of this stock in 1996. This action would also allow the bank to convert to a fully private Board of Directors.

Further, the budget includes a proposal to establish a loan program to complement the highly successful grant program for distance learning and telemedicine. This program would provide additional financing for facilities and equipment to support telecommunication linkages among urban and rural learning and medical facilities. The demand for grants far exceeds the \$7.5 million appropriated for 1995. The budget includes \$15 million in grants for 1996, and \$100 million in loans (\$25 million at 5 percent interest and \$75 million at the Treasury rate) for the new program.

We are also proposing that the water and waste disposal program be increased significantly. The 1996 loan level for this program, \$880 million, would be about the same level as appropriated for 1995, which was \$905 million. However, it would be higher than the \$828 million level that can be supported in 1995. Further, subsidy costs would increase from about \$126 million appropriated for 1995 to almost \$200 million, due to Treasury interest rate increases that have already occurred. Grants would be increased from \$500 million appropriated for 1995 to \$590 million for 1996.

The water and waste disposal program is the primary source of Federal assistance for rural areas to meet the health and safety standards of the Clean Water Act. There is more than sufficient evidence to indicate that the need for assistance far exceeds current funding levels. A number of rural households still lack complete plumbing, and many of the poorest rural communities cannot afford to provide the basic amenity of clean and sanitary running water without Federal assistance. Under the Administration's Water 2000 initiative, Federal, State, and local governments are working together to ensure that all rural households will have clean and sanitary running water by the year 2000. Increasing the water and waste disposal program in 1996 is consistent in the efforts being made under that initiative.

Rural Housing and Community Development Service

The Rural Housing and Community Development Service (RHCDS) programs are also budgeted at levels at least equal to the estimates in the 1995 Appropriations Act. The low income single family (Section 502) program was particularly hard hit by interest rate increases in 1995. The \$227.5 million appropriated for subsidy cost was intended to support a \$1.2 billion loan level. The current estimate is down to \$934 million. The 1996 budget includes \$251.9 million in subsidy cost to restore the loan level to \$1.2 billion. The estimate for 1996 does reflect some regulatory changes in the way interest credit subsidy is computed. These changes are being made largely to simplify administration of the program. Borrowers will still be eligible for subsidy based on their contributing approximately 20 percent of income toward housing.

Unsubsidized guarantees of single family housing loans would be increased from \$1.0 billion appropriated for 1995 to \$1.3 billion for 1996. This program has proven to be very popular in recent years. It provides an opportunity to work with private lenders to assist rural families who can afford to pay a commercial rate of interest to achieve the goal of home ownership. The program represents very little cost to the Government, and helps create jobs for the building industry in rural America.

The budget also includes \$75 million for credit sales of single family housing properties acquired through foreclosure and other such actions. No funds were provided for this purpose in 1995. As a result it has been more difficult to dispose of such property, which results in increased costs to the Government for maintenance repairs.

The rural rental housing loan program (Section 515) would be held to \$220 million, the same level as appropriated for 1995. Most of these funds would be targeted for the rehabilitation of existing projects. We recognize that there is a substantial backlog in applications for this program. However, the program is extremely costly. Loans are made at 1 percent interest for 50 years, which produces a subsidy rate of over 50 percent. In addition, the typical project financed under the program requires that at least 60 percent of the units receive rental payment assistance. Such assistance is provided in contracts of usually 5-year duration, costing about \$13,000 per unit.

The budget includes \$587 million for rental assistance payments, compared to \$523 million appropriated for 1995. The bulk of this assistance is needed to renew contracts in existing projects. Without such assistance, the low-income families who occupy assisted units in these projects would not be able to afford the rent, and the projects would probably fail, which could result in a substantial loss to the Government on the outstanding indebtedness.

Most of the other rural housing programs serve specific needs, such as repair, self-help, preservation, and farm labor housing. The budget maintains these programs at levels appropriated for 1995.

Overall, the rural housing programs are budgeted to provide assistance for about 101,000 units of housing in Rural America. This compares to 1995 levels of about 96,000 units based on the 1995 Appropriations Act estimates and about 92,000 units based on current estimates.

The community facility program is budgeted for \$250 million in direct loans and \$100 million in guarantees, both \$25 million higher than appropriated for 1995. Under this program, priority is given to the financing of health and safety facilities such as health centers and fire stations.

Rural Business and Cooperative Development Service

Providing access to credit for business and industry in rural America is essential for the creation of jobs, and, ultimately, the improvement of the entire social and economic environment. Efforts in this area help farm families by providing off-farm income opportunities. For many farm families, a combination of farm and off-farm income is necessary to achieve a standard of living that will keep them in rural areas. Economic diversity also is necessary to support the large portion of the rural population that is not engaged in farming.

The business and industry loan program, administered by the Rural Business and Cooperative Development Service (RBCDS), has achieved a remarkable record of success in meeting the objective of job creation in a very cost-effective way. The program operates through private lenders, and regulatory changes are under development that will allow for a minimum of paperwork and red tape.

The budget provides for a substantial increase in the level of guarantees under this program, from \$500 million appropriated for 1995 to \$750 million for 1996, and includes first-time funding for \$50 million in direct loans. The direct loans would extend the program areas that are underserved by private lenders, and allow some flexibility for financing innovative and other ventures that may be too risky for private lenders.

The budget also includes a proposal to establish a direct loan program to complement the existing Alternative Agricultural Research and Commercialization (AARC) program. This loan program would be funded at the \$25 million level, and would provide financing for projects that encourage innovative uses for agricultural products. This funding is part of the Administration's "greenbox" commitment to increase the program levels for export promotion and related programs of the Department.

Administrative Expenses

Under the Department's reorganization, each of the three agencies in the RECD area maintains its own staff for program delivery, RECD State Directors maintain the responsibility for the work of staff assigned to each agency in their States and RHCDS has the responsibility for providing program support functions. Overall, the budget includes \$569 million for administrative expenses in the RECD area, compared to \$546 million available for 1995, which excludes funds appropriated for the farm credit programs and transfers to the National Appeals Division. Staffing in this area would be reduced from 8,853 in 1995 to 8,610 in 1996. The modest increase in the budget for administrative expenses, coupled with savings due to the reduction in staffing, would be used to complete development of a new automated system for servicing single family housing loans, and to cover pay cost increases and certain relocation expenses incurred in the course of the reorganization.

Performance Partnership Initiative

The Administration proposes to provide more flexibility for tailoring program assistance in the RECD area to State and local needs. The Performance Partnership Initiative (PPI) would consolidate the funding for 14 separate RECD programs. The initiative would encompass about \$1 billion of the budget authority for subsidy costs and grants requested in the current law budget. This includes the entire funding requests for the following programs: business and industry loans, community facility loans, water and waste disposal loans and grants, intermediary relending, rural business enterprise grants, and a few smaller programs. The initiative also includes the small portion of the rural rental housing loans and rental assistance payments that is budgeted for new projects. As mentioned earlier, the bulk of funding for these housing programs is budgeted for existing projects and, therefore, cannot be included.

The initiative is expected to provide opportunities for reducing the administrative overhead in the RECD area. RECD State Directors would be responsible for administering the initiative, and would act in consultation with State and local officials, the State Rural Development Councils, and other organization and entities.

FOOD, NUTRITION AND CONSUMER SERVICES

Our budget acknowledges the crucial role played by the Federal government in maintaining a network of nutrition assistance programs for those who are needy, and providing nutrition information and education to all Americans.

Recognizing this responsibility, the budget proposes to fund the Food Stamp Program at \$29.8 billion, including a \$2.5 billion reserve, and all increases mandated by the Mickey Leland Act; and the Child Nutrition Programs at \$7.9 billion, including the School Lunch, Breakfast, Child Care, Summer Food, and Special Milk Programs. Also, as previously agreed to by both the Congress and the Administration,

our budget proposes a \$350 million increase in funding for a total of \$3.8 billion for WIC, so that most eligible women, infants, and children can receive WIC's supplemental food, nutrition education, and health care referral benefits by the end of 1996. Finally, we are proposing \$49.7 million to support a nutrition initiative designed to help all Americans understand the importance of, and how to, follow the Dietary Guidelines for Americans. This information is based on the best science we have on what to eat in order to be healthy and productive.

We also will continue to work with the States to provide them with the flexibility they need to institute local reform with greater efficiency under current law. As an example of our working together with States to achieve results, by the end of 1996 nearly all States will be well along in planning for implementation of an electronic benefit transfer system known as EBT. Through the use of EBT, a greater emphasis will be put on State/Federal coordination of programs and benefits, with attendant improvements in efficiency and reductions in complexity. We will also use EBT to identify and crack down on food stamp trafficking and other types of fraud, though we know EBT is no panacea.

Another example of our effort to reinvent the way we do business is our Healthy Meals Initiative. Working with States, local School Food Authorities, and agricultural interests, we are striving to make school lunches healthier as well as more appealing to students.

Finally, we recognize our fiduciary responsibility to the American taxpayer to improve the integrity of our programs, to uncover and end waste and fraud whether by an individual recipient or a large organization. We have efforts under way to improve payment accuracy in the Food Stamp Program, to reduce overpayments in the School Lunch Program, and to improve the overall management of our food programs.

NATURAL RESOURCES AND ENVIRONMENT

The budget in the natural resources and environment area reflects the important structural changes that were implemented this year in the conservation area. The Natural Resources Conservation Service (NRCS) was created by consolidating several of the Department's conservation programs into one agency which will place, in a single agency, the full set of conservation program and policy tools needed to help farmers produce in ways that minimize environmental problems. It also creates considerable opportunities to simplify procedures, streamline operations, expedite services and in the process realize significant savings in staffing and other administrative costs. Finally, many NRCS administrative and financial management functions at both the headquarters and field levels will be consolidated with those of the Forest Service as part of the Department's overall streamlining efforts.

One of the Administration's stated priorities and environmental goals is the protection and restoration of wetlands. The 1996 budget supports these goals and includes a request of \$210 million for NRCS to fund enrollment of an additional 300,000 acres of wetlands into the Wetlands Reserve Program. This would be in addition to the roughly 225,000 acres that we expect to have enrolled in the program by the end of fiscal year 1995. It would also supplement the 50,000-60,000 acres that we ultimately hope to enroll under the Emergency Wetlands Reserve Program, which was funded with a portion of the 1994 emergency supplemental. Also, on April 6, 1995, I announced that the Department would impose a temporary moratorium on all wetland delineations and certifications unless requested to do so by a landowner. The intent would be to allow the Congress to complete action on the 1995 Farm Bill and to have the opportunity to examine a soon to be released wetlands study by the National Academy of Sciences.

Another high priority that is supported in this budget is the need to provide adequate levels of technical assistance so that producers can continue to install and maintain their conservation compliance plans. More than 1.7 million of these plans were developed by NRCS on approximately 145 million acres of land, and judging from current estimates, the vast majority of producers will have implemented their plans successfully and on time. This was a huge job and one that will continue to demand a large percentage of the agency's technical assistance resources.

In the watershed protection and restoration area, we are requesting an appropriation of \$100 million, which is an increase of \$30 million over 1995. NRCS has completed an in-depth review of this program in an effort to reduce the unfunded projects backlog and to make sure that the remaining projects are of the highest priority, have strong local support, meet environmental standards, and can proceed in both an economical and ecological way. Through these efforts, we plan to take advantage of the unique perspective of the watershed approach for the betterment

of our communities and our environment. One example of this approach is the work that NRCS is doing in the Pacific States as part of its salmon recovery initiative.

FOOD SAFETY

As the President said in his State of the Union address, "We must remember what national action in the national interest has given us: safer food for our families." Yet, we realize that the public expects and deserves an even safer food supply. Therefore, as provided for in the Department's reorganization act, we have delegated food safety responsibilities to an Under Secretary for Food Safety and have consolidated food safety inspection functions within one agency. These changes will permit us to give greater attention and focus on our strategic pathogen reduction plan to improve the safety of our food supply throughout the farm-to-table continuum.

Recent initiatives include mandating safe food handling labels, conducting unannounced reviews in meat and poultry establishments, establishment of an Epidemiology and Emergency Response Program, and implementation of testing ground beef for the microbiological pathogen *E. coli* 0157:H7. A regulation was also proposed to require the meat and poultry industry to adopt a scientifically-based process control approach called the Hazard Analysis and Critical Control Point (HACCP) system. Under the HACCP proposal, industry would verify the effectiveness of their operations by continuous monitoring of the controls, end product testing and careful record keeping. FSIS, the agency responsible for designing and carrying out USDA's food safety program, would review each plant's records and conduct other in-plant inspection activities to verify that proper food safety procedures are being followed. For the first time, targets would be set for reducing the incidence of contamination of raw meat and poultry products with harmful bacteria.

This initiative is not about more regulation, it is about better, more effective and more sensible regulation. Based on reducing medical and other costs of pathogen-related illness, this initiative is quite cost-effective. It is as the President said, about providing safer food for American families. Although the HACCP proposal is an important step to improving food safety, more must be done, and this will require increased investment.

Therefore, our 1996 budget request includes additional funds to ensure that we have the staff necessary to fill critical on-line inspection positions, to expand our efforts in pathogen reduction, and to improve field communications and management. For slaughter, processing, and import inspection, we are requesting an increase of \$19.6 million to hire additional inspectors to fill critical on-line vacancies and to accommodate industry growth, including import-export workloads. To accommodate these increases, the budget reflects a decrease in staff years and funding devoted to administrative and other non-inspection activities.

The 1996 budget also includes an increase of \$11.9 million for the Pathogen Reduction Program to improve the control of microbiological contamination of meat and poultry products from the farm to the table. Funds would be used to enhance microbiological testing in slaughter and processing establishments, increase enforcement activities, expand the evaluation and development of rapid microbiological testing, consumer education, and risk assessment. For animal production activities, we will work with scientists and animal producers to find and implement measures from the farm to the slaughter plant and control pathogenic micro-organisms and chemical residues.

Our inspection work force is widely dispersed, yet the inspection system requires the ability of these various points to communicate large volumes of complex information rapidly. In order to facilitate the flow of information and to introduce management efficiencies, the 1996 budget includes an increase of \$8.4 million to implement an initiative to provide computers to in-plant and other field personnel. Costs of investing in this project will be partially offset by a \$1.0 million reduction resulting from streamlining the current field structure and other administrative functions supported by field automation. Full field implementation is expected to occur over a 5-year period.

The 1996 budget request proposes legislation to provide FSIS the authority to recover 100 percent of the cost of providing inspection service beyond a primary approved shift. An estimated \$106.8 million is expected to be collected in new user fees. The proposal will correct existing inequities in the manner in which the industry is charged for overtime inspection and accommodate the need for increased investment by reducing the constraints on appropriated funds that have hindered these investments in the past.

Finally, the 1996 Budget includes a 1995 supplemental request of \$9.1 million to support ongoing federal meat and poultry inspection activities. The additional funds

are necessary to maintain the current level of inspection without interruption during the full fiscal year. The funds are needed in order to minimize the risk of furloughs or reductions-in-force of meat and poultry inspectors that would reduce the amount of meat and poultry slaughtered and processed and available for consumption in 1995.

MARKETING AND REGULATORY PROGRAMS

The budget request for the Marketing and Regulatory Programs is \$389 million in appropriations to facilitate the domestic and international marketing of U.S. agricultural products and to ensure the health and care of animals and plants while improving market competitiveness for the benefit of both consumers and American agriculture.

Over 40 percent of the program effort in this mission is already directly funded by license and user fees. We are proposing legislation to recover an additional \$39 million of the cost for providing services where there is a direct benefit to the industry or user. New license fees are requested to cover the costs for administering the Packers and Stockyards Act (P&S Act). Expanded user fees are requested for the service of developing standards for grain and new user fees for animal welfare, veterinary biologics, biotechnology permits, and marketing agreements and orders.

For the Animal and Plant Health Inspection Service, the 1996 budget calls for a \$20 million contingency fund, an increase of \$15.1 million from 1995, to provide the agency with a more flexible response in controlling outbreaks of insects, plant diseases, animal diseases and for the control of pest animals and birds to meet emergency conditions. Expanding the contingency fund is expected to reduce the need for transfers of Commodity Credit Corporation funds for emergency operations.

The budget will strengthen the poultry compliance activities of the Packers and Stockyards programs by conducting more investigations in order to prevent unfair, deceptive, or discriminatory financial practices by poultry dealers. The budget also proposes legislation to amend the Packers & Stockyards Act to authorize a livestock dealer trust similar to that of the livestock packer trust. Costs of administering these new provisions would be recovered through new license fees. The proposed dealer trust would require livestock inventories and accounts receivable due from the sale of livestock to be held in trust for unpaid cash sellers when a dealer fails to pay for livestock. Dealer financial failures represent a significant amount of unrecovered losses in the livestock marketing chain.

The budget also includes increased funding for critical areas such as the development of organic standards governing the production and handling of agricultural products labeled organic, expanded monitoring of certified applicators of restricted use pesticides to ensure compliance with recordkeeping requirements, and greater resources for plant pest and animal disease border inspections.

RESEARCH, EDUCATION, AND ECONOMICS

The budget recommendations for the programs administered by the Research, Education, and Economics (REE) agencies reflect the major importance these programs have for both the future performance of the agricultural sector in the U.S. economy and for their support of the other missions of the Department and other Federal agencies that conduct programs that affect agriculture.

With efforts underway to reduce Federal spending it is important not to lose sight of the critical importance of maintaining the overall level of technological excellence that supports agriculture. Without continued gains in productivity, we cannot expect to continue to provide low cost food for American consumers, enhance farm income, compete effectively for export markets and realize environmental benefits.

REE agencies also play an important role in support of the Department's basic action agencies. Our research plays a significant role in helping our action agencies to deal with environmental problems, plant and animal diseases, improving human nutrition, and enhancing food safety. Another high priority activity is to develop stable markets for farmers through new industrial uses for agricultural crops.

Total funding for REE agencies in 1996 is estimated at \$1.8 billion, a decrease of about \$60 million from 1995. Within the total there is a modest net reduction for Federal research conducted by the Agricultural Research Service (ARS). Laboratory closing and other savings will enable ARS to add \$25 million to high priority projects including: integrated pest management, food safety, human nutrition, and improved library information services. Basic support for university research and extension through the formula grant programs is maintained, but there are proposed reductions in selected programs that do not serve broad national interests. There are several high priority proposals for construction and renovation at ARS locations, but the total ARS construction and renovation budget is down from 1995. Legisla-

tion and funding are also proposed for a new facility grant program for the 1890 institutions.

The budget also includes funding needed to move ahead on the Integrated Pest Management (IPM) initiative announced in December 1994. We have set a goal to have 75 percent of U.S. crop acreage managed under IPM systems by the year 2000. Under the initiative, we will be working closely with regional, State and local entities and producers to establish program priorities for alternative pest control technologies and area-wide projects. Additional funding is also recommended to support minor-use registration and to collect data on the use of pesticides and adoption of IPM practices.

The budget continues the formula programs that support research and extension at the land-grant universities and other cooperating institutions. There is also an important recommendation for a \$27 million (30 percent) increase for competitive grants under the National Research Initiative which is open to participation by Federal laboratories, and public and private universities and institutions and individuals.

We recognize that sound agricultural policy decisionmaking requires sound information and, therefore, the Department's economics and statistics programs will continue to provide reliable and timely information and analyses for public and private decisionmakers despite funding reductions in some areas. Funding will be used to maintain and, in some areas, strengthen the collection, reporting, and analysis of agricultural and rural data. The budget proposes an increase for an expansion of pesticide surveys including the use of registered pesticides to support the Administration's initiative to reform the Nation's pesticide laws.

REE agencies have moved aggressively in identifying ways to manage more effectively through reorganization and streamlining. ARS, with the support of the Congress, closed or discontinued 10 research laboratories and programs earlier this fiscal year and the budget identifies additional opportunities to close 12 laboratories in 1996 resulting in better utilization of the overall system of laboratories. Savings in these areas are permanent and are used to undertake important work that would otherwise not be possible. For example, although there are no specific increases proposed for work to find alternatives to methyl bromide, ARS will be committing additional resources to this problem area in 1995. ERS has already reduced its work force and has instituted a new internal reorganization to align programs to the Department's new mission structure. With the Cooperative State Research, Education, and Extension Service (CSREES), we now have a single agency to provide leadership and financial support for programs carried out at land grant and other universities. In addition to budget savings, these reorganization and streamlining initiatives should result in better program planning and coordination of Federal and State programs.

Finally, in this area, I would like to point out our continuing support for the 1890 land grant universities. The budget includes proposals for a larger facility grant program, for a modest increase in the highly successful Research and Teaching Capacity Building Grants program, and for developing mutually beneficial partnerships with 1890 institutions to conduct a wide range of programs and activities.

DEPARTMENTAL MANAGEMENT ACTIVITIES

The 1996 request includes funds to improve the management of the Department's information resources systems, continue the strategic space plan at the Washington headquarters to more economically provide office space and improve USDA's financial management systems.

The budget includes resources to fund the InfoShare Program. InfoShare is a program designed to provide improved information resources management and communications at less cost in the Department's one-stop Field Office Service Centers. For the customers, the field office of the future will offer a single central location to obtain information and submit program applications, compatible electronic data, and more accurate and timely data regarding regulatory compliance. For USDA, this new office structure will offer consistent and streamlined business processes, an integrated telephone system and compatible computer systems to facilitate data gathering and sharing, and the availability of automated tools to provide employee training at the field office service center.

InfoShare is USDA's business modernization (reinvention) program to improve service to customers of the agricultural, rural development, and natural resources agencies. Under InfoShare, the design of common field business processes, the implementation of an information technology infrastructure to support the improved delivery of services, and the facilitation of change will be coordinated by the part-

nership of agencies. Ultimately, this will allow USDA customers and agencies to exchange and access information electronically.

The 1996 appropriation request for the InfoShare program is \$59 million. The program will be supported by a combination of appropriated funds and additional funds provided by the Commodity Credit Corporation, the Federal Crop Insurance Corporation, and the Natural Resources Conservation Service. This project is an integral part of the Department's plans to create one-stop Field Office Service Centers. InfoShare is essential to making the Departments field office reorganization as effective as possible.

The Department has developed a strategic space plan for buildings and facilities in the Washington Metropolitan area which has been tailored to meet the needs of USDA based on the projected reductions in staff at Washington headquarters over the next 5 years. The 1995 appropriation provides funds for a plan to modernize the South Building—the largest building in the four building headquarters complex—and for the first phase of construction of a new office facility in Beltsville, Maryland. Modernizing the South Building will mean replacement of outdated and inadequate major utility systems, correction of serious health and safety problems, and increased capacity for a minimum of 1,500 staff, slightly over a 20 percent increase. The construction of the new facility at Beltsville will result in significant cost savings by avoiding renting commercial office space for staff dislocated during the modernization of the South Building and eliminating the need for 17 leased offices facilities in the Washington area. Once the Space Plan is complete, USDA Washington staff will be consolidated in two locations, the headquarters complex and the Beltsville facility.

The 1996 request also includes funds to complete the construction of the Beltsville office facility, provide for necessary maintenance and repairs of the South Building until the renovation project can be completed and will fully fund the General Services Administration for rental charges for all facilities outside of the headquarters complex. To assure completion of the Beltsville facility prior to initiation of the South Building renovation and due to funding constraints, the 1996 budget does not include funds for the renovation project. However, the Department plans to move forward with this project in 1997.

An increase is requested to provide the Chief Financial Officer with additional resources to implement much needed financial systems oversight and improvements. The Office of the Chief Financial Officer is working with USDA agencies to develop better systems for determining the cost of providing services and to implement performance measurements to provide for management by results. The funds will be used to correct deficiencies in the Department's financial management systems and provide better stewardship over the substantial resources entrusted to USDA.

That concludes my statement. I am looking forward to working with the Committee in the months ahead in reviewing these budget proposals as we work to meet our common objectives of serving our customers and controlling Federal spending.

FARM PROGRAM CHANGES

Senator COCHRAN. My assumption is, from your comments, that you do not plan to recommend next week any such substantial changes in the farm programs, as you just described.

Secretary GLICKMAN. I would say that is a fair statement. We are going to recommend some changes, but none that would have a profound budget impact. These changes were in our budget proposal as possible ways to achieve it in the appropriations process.

Senator COCHRAN. I thought I had read a report of the Iowa meeting which you talked about where you and the President were out there meeting with agriculture interests.

And there was some suggestion that the President said he was going to means test, or target the benefits or target the support available under farm programs to producers. Is that a correct statement?

Secretary GLICKMAN. Largely that issue came up in connection with a limitation of payments to people with high off-farm incomes. It was in previous administration proposals. I would expect that it

will be included in our proposal, that is, there will be the \$100,000 off-farm income test.

In North Dakota, there was some serious discussion when we were in Bismarck about perhaps targeting payments by providing a limit on the number of bushels or pounds for payment.

I do not think our proposal will be based on that approach because you end up providing higher payments for the first bushels of production, which tends to encourage production of that commodity in places it is not already produced. So you end up really distorting the marketplace.

I think the goal of trying to target payments to moderate-sized or family-sized producers is a good one. I have shared that goal over the years. But it is, in practice, difficult to set up a program like this and do it fairly.

On the other hand, if we are required to come up with 10 or 15 billion dollars' worth of savings, then we have to reopen this issue and look at how we achieve such savings.

WELFARE REFORM

Senator COCHRAN. What proposals are going to be submitted for welfare reform that would include the food and nutrition assistance programs administered by the Department of Agriculture?

Secretary GLICKMAN. Under Secretary Haas has some proposals on the antifraud provisions. She has been working on them with our Inspector General. I think the House's welfare reform proposals include some of them.

I would say, however, there is one proposal that will not be in there, which is block granting food stamps. The administration is opposed to block granting the Food Stamp Program.

But there will be a variety of reforms of the Food Stamp Program dealing with State error rates and eligibility, as well as fraud and electronic benefit transfer.

SUPPLEMENTAL BUDGET REQUESTS

Senator COCHRAN. One thing that was of interest to me, we were looking at the supplemental budget requests submitted by the administration, and the rescission requests as well, that we dealt with recently in the Senate.

We are now beginning a conference today to resolve differences between the House- and Senate-passed bills on those subjects.

In looking at some of the nutrition programs, the Food Stamp Program particularly, it seemed to me that with unemployment rates declining, more people working—in my State, for example, we had a lower unemployment rate in February than we have had in 20 years—yet the Department of Agriculture continues to project increases in the cost of the Food Stamp Program.

More and more people are working. Fewer and fewer people are unemployed, for whatever reason, particularly in growth areas like Mississippi, and yet the food stamp costs continue to go up.

What is the reason for that? And is not there some way to take a hard look at that program and the way it is designed to see if we are not providing some people assistance under these programs, maybe not just the Food Stamp Program but others as well, who

ought to be providing for their own needs? Is that a question that has been looked at hard by this administration?

The President came into office talking about reforming welfare as we know it. But some of these programs are just continuing to grow in spite of the fact that we have better economic conditions.

It makes you wonder whether or not there could be some changes made that take the benefits that are provided and make sure they get to the people who really need them. If there are a lot of people out there who do not really need them and are still getting them, we need to put a stop to that, do we not?

Secretary GLICKMAN. Yes; and I think it is a good question. Let me make the following point: While it is difficult to project, since food stamps are an entitlement program, what the needs will be, it is obvious that the unemployment rate is down some.

But the administration's projection is that with food cost increases and some fear that we may see the number of people eligible for the program increase in the next couple of years, that that number will be increasing.

In addition to that, we have—the Hunger Prevention and Mickey Leland Acts adopted during the last 3 years, which increase eligibility in some areas. I voted for those programs as well. So a lot of that comes from more generous eligibility requirements that had been put into the statute.

But the fact remains that there are nearly \$2 billion in improperly issued benefits paid out. In the first place we ought to look at those benefits that do not go to needy people, or are improperly given to needy people, whether through fraud or through tremendous error rates.

We are looking at that very seriously, because it is a tragedy to have money going out that does not need to go out.

We are looking at the whole issue of electronic benefits transfer—replacing stamps with essentially a wireless system that would dramatically reduce the administrative costs of running the system, which are over \$1 billion a year.

But I would say this to you, that by and large, the Food Stamp Program has been very successful in doing more to alleviate hunger and malnutrition in this country than any other program.

So the administration is sensitive to your concerns. I intend to fight these efforts. I mean, I intend to fight fraud and support the efforts to try to reduce the improper issuance of food stamps.

But, at the same time, I do not want to throw the baby out with the bath water either. So we will work with you to see if there are responsible ways to limit the growth of the program.

GATT AND NAFTA

Senator COCHRAN. One other area that you mentioned in your comments was to help ensure fair trade in this post-Uruguay Round environment. We also have opportunities in NAFTA that we did not have before for market access and improving our export successes.

Let me suggest that it would be appropriate, I think, for the administration to come forward with some recommendations to the Congress for either new initiatives or improvements of old programs to try to help make sure that our producers and our agri-

culture exporters are treated fairly and have equal access in these markets.

We heard in earlier testimony from officials from the Department of Agriculture that Canada and the European Union are gearing up and setting aside funds now to help ensure that commodities that are produced in their countries are promoted, are supported in the competition out there in ways that are legal and in ways that are consistent with the provisions of the Uruguay Round GATT agreement, and NAFTA as well.

If we are sitting idly by and doing nothing, and even encouraging those in Congress who want to do away with all of these programs, it seems to me that we are going to be left in the lurch. We are going to lose market share. We are going to see our exports decline rather than increase as they should. And, I want to know what you are doing about it.

Secretary GLICKMAN. I absolutely agree with you. Yesterday I saw a wire story that indicated that the European Union's spending on agriculture was to increase 10 percent next year.

I believe that amount was \$50 billion the European Community was spending on agriculture programs, largely direct payment programs to producers.

Now, imagine that. Four times what we are spending. Five times what we are spending by the European Community. So, to those who want to eliminate the farm programs, they have to view this in context of what our competitors are doing.

It is just foolish to zero out a lot of these programs at a time that this is occurring. And that is particularly true with respect to programs like market promotion programs, the Export Enhancement Program, and particularly agriculture research programs that are necessary in terms of developing new and more competitive product lines.

So I am meeting with the Canadian Agriculture Minister today. He is here in this country. It is obvious that we are going to be talking about these issues as well. The United States must maintain a firm fair trade policy. We have to put our money where our mouth is.

Senator COCHRAN. Well, I am glad to hear you say that. I want you to know that this committee is going to be very active and aggressive in our efforts to come up with the needed support for the effort to ensure that America's farmers are treated fairly in the international marketplace. We think that is a very important and high priority.

Senator Bumpers.

Senator BUMPERS. Thank you very much, Mr. Chairman.

Mr. Secretary, first of all, welcome to the committee.

Secretary GLICKMAN. Thank you.

Senator BUMPERS. This is your first appearance here and we are very honored to have you.

EXPORT ENHANCEMENT PROGRAM

Let me ask you a question. You mentioned export enhancement. And you and Senator Cochran were discussing that issue generally. We spend about \$2 billion promoting agricultural exports.

I think it is a pretty good investment. It cuts our trade deficit every month very dramatically because we export something like \$40 billion more than we import—maybe not that much—\$27 billion more. Is that a closer figure?

Secretary GLICKMAN. This year's estimate is \$20 billion.

Senator BUMPERS. We export about \$20 billion more in agricultural products than we import in agricultural products. So it keeps our trade deficit, as bad as it is, from being much worse.

MARKET PROMOTION PROGRAM

I want to quarrel with that. Why do we need to put \$110 million into the Market Promotion Program that goes to the biggest corporations in America? Why cannot they handle that themselves?

Secretary GLICKMAN. Well, let me make a quick comment. I would like the Deputy Secretary to respond to it. I was actually a mild critic of the MPP during some of my days in Congress. I thought program payments were going to people who could fend for themselves quite nicely.

There are an awful lot of people, associations and smaller growers and smaller companies, who benefit from the development assistance, branded name assistance that the big companies have the capability of doing that smaller companies cannot.

So it has been useful for them. In the last year or two, through changes that Congress has made in the program and through how these payments are allocated by USDA, there has been a real attempt to try to improve and be more sensitive to putting those people in the program who genuinely need that market promotion assistance and not those who do not.

But let me ask the Deputy Secretary to comment further on that.

Senator BUMPERS. Mr. Secretary, let me say to you before you answer, I probably would not object as strenuously to this program if it were a small business program. But it is not. And I think that is what the Secretary was saying, that he is trying to make it move in that direction.

There are more than 700 corporations which participate in this \$110 million program. They took a page out of the Pentagon's book. Spread it around and you never will defeat it.

Mr. ROMINGER. It is true that we are refocusing the program toward small business. And there is a much greater emphasis on small business participation in the allocations that will be coming out in the next month or so, I guess, for the 1995 program.

I think you will see that we have followed the direction of Congress in our emphasizing small business in the allocation process.

Senator BUMPERS. I hate to call names, but you know the companies involved: McDonald's, Gallo Wines, Sunkist, and others. Those companies are fine. We are proud of them. But they do not need Government largess. It is corporate welfare at its very worst.

DECLINING FARM PAYMENTS

Mr. Secretary, you said in your statement that our payments this year, farm payments, will be down from \$10.6 billion in 1995 to \$9.1 billion in 1996. Can you give us generally how you calculated that? Where is the savings coming from?

Secretary GLICKMAN. Well, we know there is some savings in the cotton program because of cotton prices being at their all time high. Steve, do you want to comment on the reduced savings, maybe by major program area?

Mr. DEWHURST. Sure. The estimates that we included in the budget are developed by the World Agricultural Outlook Board and the relevant USDA agencies.

They take a look at each crop and they take a look at current conditions and long-term trends and then formulate an estimate for each crop, based on November crop conditions which then becomes the basis for the budget.

So if you look at the fiscal year 1996 budget, compared to 1995, for instance, you will see the outlay estimate for feed grains in 1995 is \$3.7 billion. But in 1996 it is about \$2.7 billion.

Senator BUMPERS. Say that again for me, Mr. Dewhurst.

FEED GRAINS

Mr. DEWHURST. Yes, sir; the outlay estimate for feed grains is \$3.7 billion in 1995 and \$2.7 billion in 1996. So that is a reduction. In wheat, the estimate actually goes up. It goes from \$1.2 billion in 1995 to \$1.7 billion in 1996.

In rice, it goes from \$959 million in 1995 to \$856 million in 1996. So that crop is down.

Senator BUMPERS. Is that based on acreage or price, that rice figure?

Mr. DEWHURST. It is based on a supply and demand calculation that takes into account acreage, price—it obviously projects the weather.

COTTON

Senator BUMPERS. Let us go down to cotton.

Mr. DEWHURST. Cotton, we go from—well, in cotton I will just give you the history. In 1994 we had \$1.5 billion in outlays in cotton. We have a projection for 1995 of only \$354 million. We have a projection for 1996 of \$857 million.

Senator BUMPERS. A projection of \$857 million for what year?

Mr. DEWHURST. In 1996. It shows it going up. I was incorrect.

Senator BUMPERS. How can cotton, which is over \$1 a pound for the first time since the Civil War, show increased cost? Do you anticipate the price going back down?

Mr. DEWHURST. I assume——

Secretary GLICKMAN. I guess that is it.

Mr. DEWHURST. You see, you project——

Senator BUMPERS. Well, let us approach it a different way. I assume that most cotton farmers have announced how much cotton they are going to raise. I know in my State it is up dramatically. I mean, these people are used to 70 cents and 75 cents a pound.

All of a sudden it is \$1.05 a pound. And it is anticipated that the pest problems that China has been having and other countries have been having is not going to be alleviated in 1996.

Why would we not be a beneficiary? I mean, if cotton is—what is the target price on cotton now, 81 cents?

Secretary GLICKMAN. Around 72 to 72.9 cents?

Senator BUMPERS. I do not think that is right, Mr. Secretary. Do you have anybody who can tell you for sure? We will get it right now.

[Pause.]

Secretary GLICKMAN. Yes; go ahead.

Senator BUMPERS. I cannot imagine, if the current projections about China and other countries who grow cotton are correct, plus the increased demand for cotton in this country as to how on earth, under those circumstances, we can go from \$354 million this year to almost \$1 billion next year.

Secretary GLICKMAN. I think that the projection has to do with—you know, the State of Georgia, for example, has 58 percent more land——

Senator BUMPERS. 58 percent——

Secretary GLICKMAN. This year than last year. And I think a lot of this is based upon the world market conditions next year. But they may be wrong. The fact of the matter is, it may not cost us any money next year.

COTTON CROP

Senator BUMPERS. Mr. Secretary, this year the cotton crop is going to go up. Mr. Secretary, I understood that Georgia has announced an increase for 1995, this year's crop, at 58 percent.

Secretary GLICKMAN. That is right.

Senator BUMPERS. Is that correct?

Secretary GLICKMAN. That is correct, 58 percent.

Senator BUMPERS. Now, that is the biggest of any State increase.

Secretary GLICKMAN. That is right.

Senator BUMPERS. Some States cannot. I do not think California can increase their production rate.

Secretary GLICKMAN. Texas went up almost as much as Georgia this year.

FOOD STAMP WAIVER SYSTEM

Senator BUMPERS. Let me just ask one other question. This relates to the waiver system the Department has been granting to States to issue cash instead of food stamps.

There are a whole host of things at issue—for example, when somebody goes to the grocery store to buy groceries with food stamps, they do not pay sales tax. When they pay cash they have to pay sales tax. So it is a net loss to them in that category.

If you were Governor of my State, where we still charge sales tax on food, you would love it. It would be a \$20 million increase a year just on food stamps alone.

I do not mean to demean poor people. But when the television cable guy drives up in the front yard to cut off the cable, and somebody has just gotten a \$150 check instead of food stamps, what do you think that person is going to do? Do you think the cash is going to pay the cable guy or going to buy groceries?

Every study I have seen shows that grocery sales in areas where pilot programs have been initiated—where people have cash instead of food stamps—went down.

The whole purpose of the Food Stamp Program is based on a conscious decision we made on a policy in this country. We did not

want any children to go hungry. We did not want anybody to go hungry, period.

And now, we turn right around and almost guarantee that sometimes they are going to go hungry. Are you familiar with this?

Secretary GLICKMAN. I am. And of course, again, when I was in the House I agreed with you. And I think this was a decision made to cooperate with certain States and their particular needs.

I must tell you, I find this argument to be somewhat in parallel with the whole issue of whether we should block grant food stamps or not because if you block grant food stamps, what you will be doing is essentially giving those States the cash to do exactly what, you know, a couple of States have the waiver authority to do.

Senator COCHRAN. Senator Burns.

Senator BURNS. Thank you very much.

TARGET PRICE ON COTTON

Secretary GLICKMAN. Let me just say, the target price on cotton is 72.9 cents.

Senator COCHRAN. Senator Burns.

Senator BURNS. Thank you, Mr. Chairman.

WOOL PROGRAM

We might find some money. We killed the Wool Program, Mr. Secretary, but we are still collecting the tariff of around \$400 million. If we could put that \$400 million into ARS or FAS to help us out. You might want to find a way to do that.

We just quit paying the incentive to the producers, of which we are going to have 30 percent less sheep in this country as a result of that next year from whenever the program was killed.

AGRICULTURAL RESEARCH SERVICE

So you might want to—we want to take that tariff and keep it in the USDA and finance some of our ARS because I am hearing that ARS is in trouble.

And I want to—I think for the first time in the history of this country our yields in wheat are starting to go down. They are not replacing our plant breeders in genesis.

Whenever we start talking about plant breeders and coming up with new strains of barley and wheat that are disease resistant—you talk to any of your land-grant schools. They are not replacing those researchers once they retire. And it is because of money.

And I want to protect my little ARS unit in Sydney, MT. What we can do in Sydney cannot be done at Beltsville because of the northern high plains. And we have to maintain those laboratories across the country if we are doing research.

FOOD STAMP PROGRAM SMART CARD

No. 2, by suggesting a food stamp program to throw the stamps away and go to a Smart Card. I think we had it figured at onetime that we could save over \$1 billion with the Smart Card.

And Ed Madigan, when he was secretary we started out and had a couple of things going. I think if we take a look at that—because a Smart Card, on the street, has no value.

But I can go down on the south side of Billings and I can buy food stamps for 50 cents on the dollar every day of the week. And I think if we go to a Smart Card we will take the value out of those right there.

And as far as your personnel is concerned, I want to agree with you that the USDA has done a wonderful job of maintaining their credibility with the American people, and their accountability. So I want to congratulate you on that.

INSPECTION AND FOOD SAFETY

In the area of inspection and food safety, I need your help in inspection of the processed meats that are coming in from Canada to this country. Let us take a look at that.

I would entertain the idea—if it takes another inspector, if it takes more money, I would help you get that because I think the American people need to have confidence in the processed foods that are coming in from Canada.

And also, across my State I had nine town meetings in Montana over the Easter holidays. And I think you had probably come up—we heard about the same things. And I just want to make those suggestions.

AGRICULTURAL RESEARCH SERVICE

I am concerned about ARS. I am also concerned about what Senator Bumpers said about—I do not think McDonald's or Chung King or those people need any money to identify their logos on foreign soil. I think they are in great shape.

But we have to maintain our commodity groups that sell soybeans, soybean oil, wheat, corn, both to the EC and to the Pacific Rim where our markets really are, and U.S. wheat and this type of thing.

And I do not want to see those programs go away because I think we have to help people market in that type of situation.

MEANS TEST

But I just want to bring up those areas where I think we can help our producers out. The means test, I do not know how we approach it. How do we get down—because I know agribusiness is doing very well. And just like I said, I am concerned about this business of \$2 bacon and \$35 hogs.

Now, I have been around. I have traded a cow or two and I have traded a hog or two. And I know when people are making a lot of money. And somebody is making a lot of money.

Now, when you said food stamps are going to go up because of the increased cost of food, that is not because it is costing more leaving the farm. And we have to deal with that. I want to make it very clear, a farmer is not getting the money. It is going somewhere else. And I think that we have to deal with.

GRAIN INSPECTION, PACKERS AND STOCKYARD ADMINISTRATION

Secretary GLICKMAN. Senator, just to tell you—there is a concentration study being done by the Grain Inspection, Packers and

Stockyard Administration which will be completed, hopefully, by the end of this summer.

It focuses on some of the issues involved with both vertical and horizontal concentration in the livestock industry, all parts of the system—beef, hogs, poultry.

But, you know, the trends clearly have been pretty ominous for some time in terms of fewer people buying animals. And some of that may just be the way of the world. But it certainly is worthwhile for us to look at in terms of protecting the producer in that process.

Senator BURNS. That is right. And let us—for the record, three packers kill 85 percent of the fat cattle in this country. Three packers. But it is no different in the grain company.

We have only got five grain companies, and always have had, that handle all of the grain around the world. Around the world.

CBS

And I think CBS—and I do not think they were too far wrong. When you have 4 cents of wheat in a \$4 box of Wheaties, something is wrong. We are out of kilter there. And I do not know how to fix it. I am not smart enough to fix it. That is what makes me mad. So—I am just not. And I might as well admit it right here.

But I have traded a cow or two and I have made a living. A guy says, "How do you get in the cow trading business," and I said, "Well, you can buy a load and just start down the road and try to get your money back."

You might not get your money back on the first two loads, but that third load will be a dandy. And you will learn a lot by experience.

FOOD STAMP SMART CARD

So I want to help you in some of these areas, but those areas of most concern—try the Smart Card on food stamps, because I do not know of anybody at Agriculture that likes to see people go hungry.

I do not know of anybody that likes to see people go hungry. And this way, we feed people. And also, the wool tariff, let us get our money and put it in agriculture where it was designed to go into.

ARS

If we are going to collect a tariff, then let us keep the money in the USDA for agriculture producers. And also, I am still concerned about ARS.

And I think we must continue to do research and development in food production in this country. I think the people expect us to do it.

FOOD INSURANCE

I think whenever you say, "Everybody in this country is paying \$40 for food insurance—every soul, 250 million people are paying \$40 a year to insure a supply, and a safe supply of"—you know, the second thing we do every day is eat after we get up. I do not know what you do as the first thing. You have a lot of options there. [Laughter.]

But the second thing you do, you eat. And I think the insurance—that \$40 a person in this country is a pretty good insurance policy. Thank you very much for coming today.

Senator COCHRAN. Senator Kohl.

DAIRY POLICY

Senator KOHL. Thank you very much, Mr. Chairman.

Mr. Secretary, I am glad to see you. If you recall, when we met in my office prior to your confirmation we talked about many different issues. But the thing we focused on most of all was dairy policy.

And you said that you were going to convene a meeting with national dairy leaders soon after your confirmation to talk about dairy policy. I understand you had that meeting yesterday.

Secretary GLICKMAN. Yes; actually, it was yesterday.

Senator KOHL. One of the attendees was Stu Huber from my own State of Wisconsin.

Secretary GLICKMAN. Right.

Senator KOHL. Could you give us a summary of—I have not talked to Mr. Huber. What happened at the meeting?

Secretary GLICKMAN. It was a productive meeting. And I would say there were a lot of suggestions. The most universal suggestion was the elimination of the assessments and some modification of the price support figure to pay for that. There was no specific amount talked about.

We talked about a lot of other things, like, for example the retention of Federal marketing orders, the whole issue of multipoint versus single-point pricing—which I know is a big concern of yours—and regionalization of dairy, like what we are beginning to see in terms of compacts in certain parts of this country.

I thought it was a pretty good meeting. But I think the only recommendation I think everybody agreed to was the elimination of the assessments and modification of the price support system in order to pay for that.

Rich, was there anything else that you can remember?

Mr. ROMINGER. Focusing on exports—

Secretary GLICKMAN. And much more aggressive use of the Dairy Export Incentive Program and other programs in order to sell dairy overseas; a feeling that—maybe it is the Department's fault or whatever, but we have not been very aggressive in pushing dairy exports.

DAIRY PRICING SYSTEM

Senator KOHL. All right. Well, I would like to just talk for a moment about the pricing system. As you know, the current system for pricing fluid milk is now quite outmoded.

Many people are quite surprised when they learn that we currently require milk in our country to be priced based on its distance from Eau Claire, WI. At one time, Mr. Secretary, when this pricing policy was established, it may have made some sense.

Since the upper Midwest traditionally provided the Nation's reserve supply of milk, and because transportation of fluid milk was so difficult and costly, the milk pricing system was structured to

pay farmers outside the upper Midwest higher prices in order to encourage increased production outside the Midwest.

But now the goal of that old pricing system has largely been achieved. Not only have we seen production in areas outside the upper Midwest soar in response to the regional inequities in milk pricing, but we have also seen excess fluid milk production overflowing into the production of cheese and other products.

And we have seen excess fluid milk from areas like the Southwest even begin moving up north into places like Wisconsin.

The system that was designed to give certain regions an artificial advantage over the upper Midwest is now leading to the decline of dairy farming in Wisconsin. The bottomline here is that we have an outmoded system that long ago achieved its objective.

Mr. Secretary, what I would like to know is, when can we move away from the political deadlock on this issue and move toward what I regard as reason?

I have not been successful in getting any previous Agriculture Secretary to even suggest that the current system should be reformed. I am not asking you to commit here today to any single version of market order reform.

But, Mr. Secretary, can you agree that a fluid milk pricing system based on distance from Eau Claire, WI, is outmoded and is in need of some type of reform?

Secretary GLICKMAN. Yes; I think I can agree to that. It is just that I cannot give you a specific legislative fix for it. Because of the nature of fluid milk, the perishability of it, the organization of some State and Federal market orders, it has eluded us to try to come up with some sort of a national fix that takes into account the geographical needs of various regions of the country.

If we were starting over, we would never start over with this system, a single-point system in which you price milk based upon the distance from an individual point. So I would like to see if we can try to find some reforms in the system.

That is one of the reasons why we held this first meeting and will continue to do so as part of this farm bill process. So I am not wedded to the current system.

You know, some parts of the dairy industry are doing better than other parts. We heard that yesterday. Some people are very satisfied with the status quo. Others are not. And your area of the country is one that would like to see major changes. There is no question about it. So we will work with you.

Rich, do you have any comments?

Mr. ROMINGER. Well, one of the things that we heard yesterday was that they agree with you that we need to reform that system. They did not want to do away with the market order system.

But the other thing that they asked for was that we speed up the process so that it does not take so long to make modifications in the marketing order system.

Senator KOHL. Could I hope that during your tenure, this year, next year, in the next 12 months, 18 months, we could hope to see some modification based on common sense and not based on the distance from Eau Claire, WI?

Is that a reasonable hope that I could express to my constituents back home?

Secretary GLICKMAN. I think that some of the unusual vagaries of the dairy system, including the differential based upon location, is one we ought to try to see if we can move away from.

I would be agreeable to doing my best to see that we work toward that, and working with you and with others in the dairy industry to see if we can come up with some commonsense modifications in the system.

Senator KOHL. I thank you very much.

Senator COCHRAN. Senator Kerrey.

Senator KERREY. Thank you, Mr. Chairman.

NATIONAL RURAL CONFERENCE

Mr. Secretary, first of all, I want to express my thanks and congratulations to you and the President for the conference that you held in Ames, IA.

The view from the community, the ground level view from the community was very enthusiastic. The President was obviously very knowledgeable and very concerned about what is going on, not just in agriculture but on a whole range of other rural issues.

And I think the response from farmers and ranchers at the community level has been very positive. And I congratulate you, Mr. Secretary, and the President for making that effort. I think it is greatly appreciated at the local level.

Let me just go through a series of questions. I do not want to take a great deal of time with each one. If you can, just sort of tip your hand as to whether or not there is enthusiasm for it.

MOVING USDA FUNCTIONS TO OTHER AGENCIES

Is there enthusiasm in the administration to take into consideration the possibility of moving functions in USDA over to other agencies of Government?

Like school lunch to Education, WIC and food stamps to HHS. Move functions to where they belong as opposed to keeping them in the U.S. Department of Agriculture where it is increasingly difficult to justify, other than for the old, "Well, we need these groups in order to get a good farm bill" argument at USDA.

Secretary GLICKMAN. I would say the answer is no. There is no general enthusiasm to move these programs to other agencies. But I am not sure the subject has been well discussed. I am not aware of any.

Senator KERREY. I would like to surface it and discuss it, because it does seem to me that the old, "Well, we need to keep this held together for the farm bill" argument just does not work any longer.

And there is a lot of enthusiasm to try to make Government work better. The President has let on that this is a priority. The Vice President has let on to that as well. And I think we should take that kind of matter very, very seriously. I would appreciate an opportunity to either make a proposal or discuss it with you.

Secretary GLICKMAN. The way I look at this is that my job is not to just be the protector of the turf. I want to see the programs work better, too. So I am less concerned about where they are.

Sometimes the debate over where you move a program takes on such a massive focus, however, that it obscures what you are trying

to do. And you end up worse than you did before you started trying. But I would be willing to talk to you about it.

FEDERAL CROP INSURANCE ADVISORY COMMITTEE

Senator KERREY. On the issue, second, of crop insurance, are you getting close to appointing the advisory committee for Federal crop insurance?

Secretary GLICKMAN. We have not. The Deputy advises me that we are limited by statute as to how many advisory committees that we can now appoint. So we have not done this one because we are at our limit.

Senator KERREY. There is a statutory limit on the number of advisory committees?

Mr. ROMINGER. There is a budget limit.

Secretary GLICKMAN. The budget limits us to how many advisory committees, based on a—what is it, \$2 million or something?

Mr. ROMINGER. No; \$900,000.

Secretary GLICKMAN. I am sorry. We have \$900,000 we can spend for all of our advisory committees.

Senator KERREY. Well, let us find one and get rid of it. I mean, we have got to have one that is marking time out there and not producing as much as an advisory committee for crop insurance could.

The problem, as I see it, is that Ken Ackerman is going to struggle to make decisions in a rapid enough fashion to adjust the policy as we obviously need to adjust it. I mean, there are all kinds of concerns about the catastrophic insurance.

There is some concern right now being expressed by wheat-growers that adjustments are not being made rapidly enough. I have some concerns about whether or not a sufficient amount of time has been invested in preparing the people that are out there doing the adjustment analysis.

I personally think it is a mistake to tip this thing so that Government runs it. I think it is better to have the private sector run it.

It seems to me that this advisory committee could be enormously useful in helping resolve some of these issues so that we do not wait for them to build up to crisis proportion and hear from people coming to us.

As you know, Mr. Secretary, they just—they will schedule meetings in the office and they will say, "Why do you not do something about this, this, and this?"

I was very much involved with the drafting of the legislation. The purpose of the advisory committee was to give Mr. Ackerman somebody that could say to him, "Well, why do you not go to Congress and get some authority to make these changes? Because if you make these changes we think the program would operate an awful lot better."

So if it is a problem of trying to find some advisory committee to sacrifice to make room for this one, you know, count on me to help you fight the battle of getting that done.

Secretary GLICKMAN. I think it is a good suggestion. I am advised that there is a board of the Federal Crop Insurance Corporation. Now, that is different than the advisory committee. But, the members have not been appointed either.

Senator KERREY. My recommendation would be to do that because I think that it is far better to resolve these conflicts and keep this thing moving forward, because we want to make the program work. And the only way to make it work, in my judgment, is to keep it market-oriented and keep Congress, as much as possible, out of it.

By that I mean, we do not want to get to a position where we are having to intervene on behalf of a specific farmer that wants a loss adjusted in a different way than it has been adjusted.

We do not want to drift in the direction of coming back and ending up with an ad hoc disaster, which essentially we are trying to avoid. And the only way, in my judgment, to avoid it is to make this program operate.

Secretary GLICKMAN. I agree. I will personally ride herd on this. I will let you know.

CONSERVATION RESERVE PROGRAM

Senator KERREY. Next, Mr. Secretary, the head of the NRCS, Mr. Paul Johnson has been working very much, and Assistant Secretary Buntrock has been—is that it? Is it assistant secretary, deputy?

Secretary GLICKMAN. Administrator.

Senator KERREY. Is working as well, helping us develop—encouraging us to develop a local-based proposal or Nebraska plan for the CRP. One of the things that we failed to do is acknowledge to taxpayers that there are times when we spend their money very, very well.

I point out that over the last 10 years, since we have had cross-compliance in the farm bill, that 100 million highly erodible acres have developed conservation plans, which has saved billions of tons of topsoil as well as improved the quality of water throughout the entire United States of America. It is a tremendous success story in conservation.

I think the CRP can be operated much better than it has been operated the past 10 years. Originally it was more of a supply management effort. We have discovered tremendous conservation opportunities, as well as economic development opportunities through wildlife cover.

And what we are trying to do is not just give the locals more responsibility, but actually give them a sufficient amount of authority so they can help us make decisions about which land should be enrolled.

That is a tough transaction, because it is easy to say I should enroll this land. It is much harder to say I should not enroll this.

So what we are going to try to do is present the USDA those lands that, over the next 10 years, we think would make the best sense to hold in conservation as a part of our State conservation plan and which lands we think, from the standpoint of economic development, would be good as well, rather than merely, and in a very difficult way, having USDA sign individual contracts and, God forbid, end up with a more regulatory mechanism than we have got now.

Secretary GLICKMAN. Are you the only State that—

Senator KERREY. I do not know that we are the only State. I know that Paul Johnson, from his own experience as a farmer and as an Iowa legislator, has been enthusiastic about doing this. He may be doing it in other States.

I think the goal for me is to improve conservation, improve economic development, and to be able to do both in a fashion that I can say to taxpayers, whether they are in New York or Ogallala or Topeka, "You are getting your money's worth. Dollar for dollar, you are getting a return on your investment in conservation and economic development."

And we have minimized to the extent possible overpayment for the enrollment of land that should not be enrolled because it does not provide any conservation benefit.

So I just want to signal to you that I appreciate very much both Mr. Johnson's and Mr. Buntrock's efforts on this. And we are driving the locals and working with the locals. And they are very enthusiastic about being given the opportunity to participate.

There are a couple of areas, Mr. Secretary, where I would suggest that we look for a different forum to resolve some conflicts that are on the table or that are out there, not necessarily on the table.

But bring affected parties and stakeholders in, bring Members of Congress that are interested in the issue in, and sit around a table, surface the issues and one by one, go through and to the best of our ability try to negotiate out the conflicts.

WETLANDS

Wetlands is one. You now have designated, I think quite properly, the NRCS, the former Soil Conservation Service, as the lead agency of four—the Corps of Engineers, the EPA, and Fish and Wildlife being the other three.

However, now what we need to do is get the stakeholders in, including some people at the local level, as I said, and some Members of Congress that are interested in it, with perhaps yourself and Paul Johnson taking the lead, and just go issue by issue and say, "OK, now let us make some decisions. Let us make some decisions about how we are going to move forward."

I think we can make this wetlands policy work. But if we do not resolve these issues and make decisions, what is going to happen is, the whole thing is going to collapse. And we are going to find ourselves having to say, "Well, this is just something that Government, in the end, just was not able to do."

FOOD SAFETY INSPECTION

If I could, Mr. Secretary, just run through a couple of others. I think a similar kind of forum would be very useful with food safety inspection. We do not want to send a signal to consumers that we are backtracking on food safety. We want food safety to be a primary objective and a primary purpose for the inspections.

But the rules that have been promulgated for comment need, it seems to me, to be commented upon in an environment where we are all listening in, as opposed, once again, to various sectors, consumer groups, industry, cattle guys, each one scheduling a meeting in my office, bringing in their particular perspective and

point of view and saying, "Well, this is what we think," or, "It seems to me"—and then I call you, or I call someone—and the next thing you know, we are not sure what the right policy is.

It seems to me that some kind of an open roundtable discussion or forum that once again would enable us to express our views with everybody sitting there might be useful.

MEAT PRICE PROBLEMS

A third area where that might be useful—20 of us sent you a letter asking for an investigation on meat price problems.

I do not want to demagog on this issue. It may be that the market is working. Maybe all of these changes are entirely in response to the market. However, the integrity of the market is very important for us to preserve. And that integrity is seriously in doubt at the moment.

I have Nebraska cattlemen, who are hardly individuals who act in irresponsible fashion, saying that they want an investigation.

The administration has a first-rate person at antitrust at Justice, and perhaps Anne Bingaman could be involved in an open, responsible discussion—I do not want to invite people who are going to spend 20 minutes pounding their chest and pounding the table and ranting and raving and all that sort of thing. I think the facts ought to determine what policy we do.

Those are the three areas that I have identified, Mr. Secretary. And I am just curious as to what your response would be to perhaps looking for a changed forum to make some decisions in these areas so that we can continue to get movement.

Secretary GLICKMAN. I think you are right on all three. The issue is the methodology on how you hear the different points of view.

WETLANDS

On wetlands, as you know, one of the first things I did was to stop the delineation of them until you all began the process of writing a farm bill.

And I think, secondarily, we could sit down and figure out what we really wanted to do in the future in terms of wetlands delineation, and how it relates to other environmental issues.

FOOD SAFETY AND INSPECTION

On food safety and inspection, you know, this is very controversial. I met with some folks, cattlemen, who are, you know, not happy, think there is a conspiracy to further reduce their income level by basically taking too much of the cow away from them at the slaughtering plant as a result of what they consider to be layering of meat inspection.

I happen to believe that our HACCP proposals generally are on track but need good, solid, balanced responsible input.

Senator KERREY. I would tell you that I agree, in this case, with the cattlemen. I think we are layering HACCP on top of an old inspection system.

What I am saying is, why not create an environment where everybody brings their point of view to each other around a table and tries to see if we cannot resolve these conflicts and make decisions.

MEAT PRICE PROBLEMS

Secretary GLICKMAN. And on the meat price problems, you know, we have this Packers and Stockyards study. But this is a perennial problem that does not seem to go away.

Senator KERREY. As you know the study will be released, somebody will come up here and they will testify, and we will get questions.

And what I am suggesting is that somehow we need to force the people who have a stake in this thing to sit around the table and say what they have been saying to us individually to each other, and force these apparent conflicts into a point where we can begin to make some decisions.

Secretary GLICKMAN. Do you think that what you are suggesting maybe is I conduct, or the Department conducts full-fledged forums?

WETLANDS

Senator KERREY. Take the wetlands, for example. Why not invite the other three Federal agencies and invite some people—again, stakeholders at the local level, some farmers—who understand what this problem is, who want to make the wetlands program work, who are not antipreservation of wetlands, who want to make it work, who have expressed a desire to make it work and have some ideas about how to make it work.

Perhaps some State conservation people and a couple of people from Congress that understand and have an interest in the issue as well.

Secretary GLICKMAN. And do it with the other two issues.

Senator KERREY. Yes; my fear is that the current forum of making decisions, on these three at least, does not allow us to make very good decisions. And we just wait and wait and wait. And it reaches crisis proportion, and then you make a decision and—

Secretary GLICKMAN. If I may offer just one suggestion to you as well. I think it is a good idea. But the folks at the Department tell me there is a Federal Advisory Committee Act which makes informal discussion with anybody about impossible.

Senator KERREY. Well, all we have to do is notify the public that the meeting is going to occur, and keep the meeting open. I mean, there is an open meeting rule. I am familiar with it. And I do not think that should be a deterrent.

Secretary GLICKMAN. I do not either. But I am just saying that that is something that you all are going to have to look at and make sure that the reasonableness of sitting down and talking informally on some issues does not get overlooked.

Senator KERREY. I understand. I would like to talk to you about doing it.

I want to make one other point, and then I will shut up here so the chairman can take over again.

I just got back from a 10-day trip to China, Mr. Secretary. And you have been there before and know there is tremendous market opportunity.

GATT AND THE WTO

In the deliberations over GATT and the WTO, the trade representative, Mr. Kantor, told us that he knew that soybeans had gotten kind of a short end of a stick and that when it came to talking to China about working out their ascension into the WTO, that soybeans are going to be top on the list. I would like to make sure that that happens.

But I want to alert you as well that I think there is a tremendous market opportunity for us. You know that. And I hope that you can put it at the top of your list to press our trade representative, Mr. Kantor, who has done a great job in my judgment, and say that the Chinese need to drop the tax that they have got on live cattle and live hogs.

CHINESE IMPORT TAX

It does not make any sense. They impose a 50-percent tax right now. They do not have commercially feasible protocols for the sale of food.

It could be a tremendous opportunity for China, which is struggling with inflation right now—inflation is their top and No. 1 issue. They are paying more than they ought to for food.

They are adding 15 million people per year to their country. They are not going to be able to sustain their production of corn and so forth that has allowed them to feed themselves up until now. They are not going to be able to sustain it. As their standard of living goes up, the demand is going to go up for value-added products and they are going to need us to help them solve this inflation problem.

China has a Communist government. It is not terribly accountable and they make a lot of mistakes. And this is one mistake they are making. They are imposing excess costs on their consumers at a time when inflation in this developing country is their No. 1 problem.

So I see it as a great opportunity to get a win for American producers and a win for Chinese consumers at the same time.

Secretary GLICKMAN. I intend to make a visit to the Far East as soon as I can. And I would like to address this point you made on a tax on importing cattle.

Senator KERREY. Yes.

Secretary GLICKMAN. Anything else you think of which would be of use to me, I would like to hear it.

Senator KERREY. I can say that the Chinese are relentless in the pursuit of their objectives. And I think we have to be as well.

And by that I mean you can come in and do your best and be respectful and all of that sort of stuff, and say "Here is to the revolution" and all that junk, and "I am for peace, love, and brotherhood" and all that. But at the end of the day, you have got to say "Here is what we want: A, B, C, D."

And the trade representative needs to say it. You need to say it. You need to notify any Senator or Representative who is going to go over there that they need to say it. We need to be relentless in our pursuit of our objective. And eventually they will change their policy.

Secretary GLICKMAN. Good point. Thanks.

Senator KERREY. Thank you, Mr. Chairman.

USDA'S BUDGET REQUEST

Senator COCHRAN. Mr. Secretary, in looking at the budget overall, it is apparent that the administration is requesting more money for food, nutrition, and assistance programs, less money for agriculture, and the trend of higher percentages of the Department's budget for things other than production agriculture continues. That is a fair statement, is it not?

COMMODITY CREDIT CORPORATION

Secretary GLICKMAN. In actual dollars it is. Although I think it can be explained to some extent by the spikes that have occurred in the Commodity Credit Corporation's spending as a result of market prices and as a result of the 1990 farm bill changes.

Senator COCHRAN. Well, just looking at the Commodity Credit Corporation outlays, according to your statement on page 8, you talk about the decline that has occurred from \$16 billion for the period 1986 through 1990—and I think that must be \$16 billion annually—

Secretary GLICKMAN. Annually.

Senator COCHRAN. As far as an average annual cost between those two dates, between 1986 and 1990. And then \$11 billion from the period 1991 to 1995. And to less than \$8 billion for the period 1996 to 2000, I think you said. And in the year 2000 that number would come down to about \$6.4 billion in your verbal testimony.

PUBLIC LAW 480

And then you described other program changes as well. We look at the Public Law 480 Program, which is a supportive program for production agriculture indirectly, even though it is an international program.

RESCISSIONS

The administration requested rescissions in the fiscal year 1995 funds that had already been appropriated. And for 1996, there are further reductions that are contemplated in the budget that was submitted by the President.

So it just seems that if you look at the budget in a macro analysis way, you cannot help but be struck by the fact that the funds that are going into research that keeps us competitive, the funds that are going into direct support, technical assistance—you talked about how important it was to a lot of producers you ran into during your rural America meetings—all of these programs are coming under severe pressure.

WATERSHED PROGRAM

The Watershed Program, if you look at that, for example, where we are trying to protect farmland that is in danger of being washed away, in effect, in my State. Those funds are coming down dramatically. Whole program areas in some of these agencies are in great jeopardy because of the budget request of this administration.

So I just call attention to that because it is disturbing to me. We are sending a message to farmers that you are going to be on your own here pretty soon. Many of you are on your own already.

And those critics of agriculture programs are being supported, in effect, by this mindset of this administration, which is, we are going to provide funds for a lot of the programs, and they are important.

FOOD PROGRAMS

The food programs are important. And I support them. I always have. I think there are ways we can cut the overhead and the cost of administration and make sure that those who really need the benefits are getting them and not those who ought to be taking care of themselves.

I still think there are opportunities for reform. And I have been disappointed that we have not seen more reform suggested by this administration in that area. We were supposed to eliminate welfare as we knew it.

There has been a lot of talk; but there has been absolutely no action whatsoever. The efforts that are being made now are being driven by the Congress in this area.

I worry about too many cliches substituting for reform, in my view. I think we ought to give more flexibility to local administrators and to State and local governments. But I am not convinced that just using the phrase "block grant" is going to solve anything, really.

PROGRAM CHANGES

We are going to need program changes, whether they are at the Federal level or at the local level. What I hope we can do is give the local administrators and Government officials more flexibility to make those program changes.

I do not think we ought to make all of the program changes here in Washington and expect that one change is going to suit every individual difference that exists throughout out country.

It is such a complex country. A problem in New York City is not going to be solved with the same program change as the one in rural Mississippi. So that is why I think it is important for us to have flexibility as sort of the goal here, within the requirements of remaining sensitive to the needs of those who do need help from the Government.

I am not suggesting that we throw welfare reform out. You talk about throwing out the baby with the bathwater. I am not for that either. But I am disappointed in the budget. That is just my summation of it all.

I think there are so many things in here that are left underfunded in the administration's request. I think we are going to put rural America on a downward path to economic deprivation in many areas. And it is going to be a very difficult thing to overcome.

USDA REORGANIZATION

Let me ask a couple of specific questions. I know the buzzer has sounded for the votes that we are going to have on the floor now.

But in the terms of reorganization and reinventing Government, your written statement suggests that we are going to save several hundred million dollars.

In your opening statement you said we were going to save several billion dollars with this reorganization. One thing that struck me in the testimony that we had from agency officials and Department officials earlier this year was that more rather than less money is needed for the reorganization.

It is costing money to consolidate and to close offices and to move people around. It made me wonder where are these savings occurring and when will they occur? Is there an answer to this?

Secretary GLICKMAN. I am going to ask both Steve and the Deputy to answer. But I just wanted to make one point in reference to your comments, which I respect very much.

The fact of the matter is, this administration has proposed in the budget cuts of \$1.5 billion over 5 years. The word out of people with a great deal of authority in the Congress is that there must be cuts between 8 and 10 times that amount.

So the truth of the matter is that in terms of the aggregate numbers, we are proposing virtually, in the big picture, very few cuts in the Agriculture budget, on the program side as well as on the nutrition side—and not to say that we should not be looking at them.

It appears to me that if we were to adopt the kind of cuts that I hear are coming out, they would have a genuinely profound effect on agriculture. Much more than the incremental cuts that we have been talking about.

So, in all fairness—and I am not one of these blind defenders of anything. I am just saying that I think you are right. I think in some of the areas—in research, we have to be darn careful before we do anything stupid.

But the fact of the matter is, if we were to take cuts of the magnitude that I have been hearing about, it would have a profound effect on agriculture. And we are going to try to resist those, as I have said publicly and privately.

That does not mean that I am defending every program decision that has ever been made by the Department of Agriculture. But I think it is important to recognize that, if anything, we are trying to hold this dam before it bursts. And it is a tricky thing to do.

Do you want to comment on the—

Mr. ROMINGER. The reorganization. Yes.

It is true that in the first years of the reorganization there are some additional expenses in moving people around. But it is also true that we have some savings in personnel.

We are down over 5,000 people already in our projection of more than 13,000 fewer employees at USDA. So that is the major savings in the reorganization. Then, in the administrative restructuring we expect to save additional money as well.

So that is where we get the total of \$4.1 billion over the 5-year period. And we recognized when we started into it that there were some up-front costs involved in the reorganization.

CROP INSURANCE

Senator COCHRAN. Let me ask you a specific question about crop insurance. And then I will have to go to the Senate floor.

On pages 5 and 6 in your statement you talk about this new crop insurance program. One thing caught my attention. And that was down in the third paragraph on page 6.

You talk about "the 1996 budget provides full funding for continuation of the program"—and you are talking about the CAT, the catastrophic coverage program—"Under the new program all costs for 1996, except Federal salaries and expenses, are treated as mandatory spending. The reform legislation does, however, subject this spending to the appropriations process. Accordingly, the budget requests that 'such sums as necessary' be appropriated."

Does anybody have an estimate so that we will know how much to appropriate? You are just leaving it up to us to guess at how much in crop insurance payments are going to be made to beneficiaries of this program.

You talk about the fact that 80 percent of the people who are eligible will probably participate in the program. It seems to me like we are going to embark here on a real big guessing game.

What could happen is, halfway through the year, if we have a big disaster you are going to have to submit a supplemental. We are going to have to respond. What are we going to do? I guess treat it as an emergency.

If you do, where are we then in the context of reform? Are we not back where we were with disaster payments and the like?

Haven't you just suggested—we are doing away with disaster programs, "Everybody buy insurance."

Secretary GLICKMAN. Steve, why do you not—

Mr. DEWHURST. Well, Senator, the budget does include projections as to how much money is involved in all of this. And it projects that we would need about \$2 billion in 1996 for the indemnities and the delivery expenses that we pay to the private insurance companies for this program.

Senator COCHRAN. So those numbers are in the budget request.

Mr. DEWHURST. Yes; you know, the problem is that we have the same problem. We have no way of knowing if that estimate is right or wrong.

Senator COCHRAN. Right.

Mr. DEWHURST. But once the claim is put in, we have a legal obligation to pay it.

Senator COCHRAN. Right.

Mr. DEWHURST. So our only way to deal with that is to ask you to appropriate such sums as necessary.

Senator COCHRAN. OK.

Mr. DEWHURST. But the numbers are in the budget.

Senator COCHRAN. OK. Thank you very much. And I understand that now.

SUBMITTED QUESTIONS

Mr. Secretary, thank you very much for being here and cooperating with our subcommittee. We will have some additional questions. We hope you can respond to them within a reasonable time.

Secretary GLICKMAN. We will do that. Thank you.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

Question: The budget justification includes a proposal entitled the "Performance Partnership Initiative." As I understand it, this initiative will allow state Rural Economic and Community Development directors to shift monies between appropriated accounts. What the Administration is proposing sounds like block-granting of these programs. However, this Administration has been highly critical of proposals being considered in Congress to block grant welfare programs. Does the Administration advocate block grants to state directors of federal agencies?

Answer: The Rural Performance Partnership Initiative was developed as a means of incorporating some needed flexibility into existing categorical programs to make them more effective tools for RECD state directors to tailor assistance to meet the development needs of a particular state. The initiative consolidates the funding for 14 programs into three funding streams, one for Rural Housing and Community Development Service, one for Rural Business and Cooperative Development Service, and one for the Rural Utilities Service. The initiative would permit state directors to transfer up to 25% of the funds in each stream to the other streams depending on the needs of the state. Nationally, the transfer would be limited to 10%.

A block grant was not considered appropriate because the majority of the programs are loan programs. Financial assistance available to rural areas would have been significantly reduced under the block option, since the Federal government can leverage available budget authority into much greater loan authority. The Administration has made similar "Performance Partnerships" proposals for other Departments including, the Department of Housing and Urban Development and Health and Human Services each of which is designed to most effectively deliver the programs under its jurisdiction. In addition to consolidating funding, the Performance Partnerships have been designed to create incentives to monitor performance and reward desirable results. The delivery mechanism needs to be tailored to the types of programs and the objectives to be accomplished.

COMMUNITY COMMITTEES

Question: It is my understanding that the Department is currently considering the elimination of the Community Committee (CMC). Is this true? Why?

Answer: The elimination of the CMC's is under consideration. Statutory changes made in the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 (Act) removed the county convention method of conducting County Committee (COC) elections. This was one of the key functions of CMC's.

Question: What authority does the Department have to make the decision to eliminate the CMC? Has the Department sought comment on possible reductions in payments to the CMC members for mileage and per diem, instead of the abolition of the Committee?

Answer: The Act, as amended, removed provisions for the county convention method of nominating and electing COC members. By doing so, one of the primary functions of the CMC was also eliminated. The 1994 Act provides for a direct election process: "...The Secretary shall establish a county or area committee. Any such committee shall consist of not fewer than 3 nor more than 5 members who are fairly representative of the agricultural producers in the county or area and who shall be elected by the agricultural

producers in the county or area under such procedures as the Secretary may prescribe."

A 15-member task force comprised of representatives of the National Association of Farmer Elected Committees, National Association of State and County Office Employees, CFSA State Committees, State Executive Directors, District Directors, and CFSA headquarters was formed to study committee elections. This task force studied the new law and its effects, and made recommendations to USDA's Under Secretary for Farm and Foreign Agricultural Services. All aspects of the CFSA farmer-elected committee system were studied, including the cost-effectiveness of maintaining CMC's.

Question: What savings are you projecting will be achieved by the elimination of these Committees? What costs are associated with the utilization of another method of electing the County Committees, such as postage and staff time devoted to conducting this activity by mail?

Answer: We estimate savings between \$800,000 and \$1 million, which are mostly based on salary, travel, and per diem costs associated with county conventions. Realization of the savings would eliminate the use of CMC members for other purposes. The cost would be the same for a direct election by mail for COC members as it would be for election of CMC members.

BOLL WEEVIL ERADICATION PROGRAM

Mr. Secretary, the FY 96 request for the boll weevil eradication program is \$11.01 million, a decrease of \$7.05 million from the FY 95 appropriated level of \$18.06 million.

Question: Please provide an explanation of the current plan for expansion of the boll weevil program and the projected cost associated with this expansion through the target eradication date of 2003.

Answer: In recent years, the National Cotton Council has held regular meetings allowing growers to develop and revise the plan for nationwide boll weevil eradication. As a result of these meetings, cotton growers proposed an accelerated plan that would achieve boll weevil eradication by the year 2003, 13 years ahead of the original schedule proposed by APHIS. In a meeting held in February 1995, growers agreed that a revision to the traditional 30 percent Federal cost share estimated at \$413 million over the next 8 years was necessary to continue the accelerated eradication plan that they proposed. The total cost of nationwide eradication is estimated to be \$1.1 billion over the next 8 years. The Federal cost share is contingent on the level of Federal funding available and the growers' willingness to wait for program expansion. Limited Federal funding and increased grower demand for program expansion into new areas have resulted in APHIS agreeing to revise the traditional cost share. Cotton grower leaders in all the remaining infested areas (Arkansas, Louisiana, Missouri, Oklahoma, Texas, and portions of Mississippi and Tennessee) are aware of the potential Federal funding shortfalls and have agreed to cover a higher portion of the cost of the eradication program if necessary. All cotton growers will have the opportunity to decide on whether to participate in the program, with reduced Federal contribution, when they vote for referenda in the specific areas proposed for program expansion.

Question: Does the Department expect to incur expenses beyond the initial capital equipment needs in the areas of Texas that have opted for the 100% grower-financed eradication program? If yes, why?

Answer: Yes, depending on Federal funding availability. Over

50 percent of the remaining infested acres are located in Texas. In an effort to remain competitive with the Southeast States, Texas growers, in agreement with APHIS officials, began an eradication program in their State. Both cooperators agreed that, although Texas could pay for 100 percent of the program, APHIS could make contributions towards that program. This approach is in agreement with the new program and funding priorities which were implemented in the spring of 1995.

In fiscal year 1995, APHIS and the National Cotton Council's Boll Weevil Action Committee agreed to a new set of program and funding priorities for future program activities. The new priorities are as follows: (1) continue current eradication activities at the traditional 30 percent level of Federal funding that will not force the growers to re-vote, for increased assessments, to continue the program; (2) reduce the Federal cost-share in the eradicated areas from 30 to no more than 15 percent of the program costs (including capital equipment) for FY 1996 and provide capital equipment in the new expansion areas using Federal funding; and (3) equitable distribute remaining Federal funds to offset a portion of the operational costs in all "active program increments" (new program areas). These new priorities effectively revise and reduce the traditional Federal cost-share. However, Federal funding assistance in the new expansion areas, which includes areas in Texas, will be determined by the appropriation level.

Question: If the Department does not continue with the historic 70/30 grower/APHIS cost share, could this not produce a situation where two farmers whose land adjoin each other, but were covered under different referenda, could face different grower contributions as a result of this decreased Federal cost share?

Answer: Yes, annual shifts in cotton acreage and limited appropriations could make this unavoidable.

Question: Mr. Secretary, in a written answer submitted to this subcommittee by the Rural Housing and Community Development Service, I have learned that the Section 502 housing program had a backlog of applications of almost 54,000 in January 1995, and that backlog is projected to grow to nearly 70,000 by the end of this fiscal year. At the same time, I and a number of other members of the Subcommittee have learned that funds for direct farm operating loans have already been depleted, which has been a common occurrence over the last few years. What is the Administration's plan to deal with this problem?

Answer: With regard to the housing programs, county offices of the Rural Housing and Community Development Service are informing applicants of the backlog in applications and the potentially long wait for a mortgage loan. In addition to trying to ensure that rural families understand the implications of the limited funds available, we are trying to stretch direct 502 funding as much as possible.

This year, we initiated some leveraging pilots for the 502 direct loan program, and we plan to make this a major component of the program in fiscal year 1996. By participating with other lenders, we will be able to stretch our funding and assist more families in obtaining housing. Although we can assist some of our applicants with leveraged dollars by participation with the private sector, many very low- and low-income applicants will need the full financing of a direct loan. A leveraged loan carries a higher interest rate and therefore may not be affordable to our very low-income applicants. The Self-Help program helps stretch 502 funds for very low-income borrowers. This program spreads limited 502 loans funds by enabling participants to contribute their own sweat equity and therefore require a lower loan for the remaining

costs of building the home. The Self-Help program is run through non-profit organizations and local governments.

With regard to the farm lending programs, loan assistance is designed to assist those individuals who are unable to obtain loans from commercial sources at reasonable rates and terms. The number of eligible family size farming operations in need of assistance exceeds the funds available.

Targeting is one way of stretching available funds. However, targeting all direct operating loan funds to beginning farmers could have serious implications for currently indebted direct loan borrowers who rely on the Agency for annual financing of their family farming operations. Some of these applicants may not meet the definition of a beginning farmer and would therefore be denied Agency assistance. Most are unable to obtain credit from any other source. Not only would the amount that these borrowers owe to CFSA be at risk, but there could be serious repercussions to main street businesses in rural communities.

CONSERVATION RESERVE PROGRAM

Question: Mr. Secretary, in your prepared statement, you discuss the Department's intentions to allow CRP acreage to be released from the program. There appears to be a discrepancy between the estimates used by the Department and the Congressional Budget Office on acreage which will leave the program under this "early out" option. Can you please provide the basis for the Department's estimates and explain the apparent discrepancies?

Answer: Estimates by the Department of the amount of acres on which CRP contract holders would terminate their current contracts before maturity ("early out") are based on comparisons of net returns that could be earned from returning the acreage to production with the rental payments received currently. The comparisons were conducted on a random sample of more than 16,000 CRP contracts, about 5 percent of the total. These sample results were expanded to all contract acreage.

The production use alternatives included in the comparison are cropping, haying, grazing, or enrolling the acreage in 0,50/85,92. Net returns from cropping activities are estimated for each contract holder depending on the crop acreage base reduction, estimated soybean and other crop acreage, soil-specific crop yields, projected crop prices and ARP levels, local production and conservation compliance costs, and local haying and grazing return estimates.

Lands excluded from "early out" eligibility include acreage that is immediately adjacent to water bodies or that is devoted to certain specially designated practices. Also, early release lands would be required to follow basic conservation systems which limit erosion to the soil loss tolerance level, T, or less.

The Department estimates that about 4 million to 5 million acres could participate in this opportunity based on assumptions about acres that would be eligible and that could be profitably cropped under basic conservation systems. CBO assumed that no acreage would be released from the program early. However, because the Department intends to replace the withdrawn lands with new enrollments, most of the impacts of the 4- to 5-million-acre difference in assumptions do not occur until after the year 2000. Then, estimated CRP outlays resulting from USDA's early-out assumptions would exceed estimates based on CBO's assumptions. However, due to recent adverse weather conditions in several parts of the country, producers may be looking at the early release differently and our earlier estimates may need to be revised.

WATERSHED AND FLOOD PREVENTION OPERATIONS

The Administration proposed to terminate the Watershed and Flood Prevention program in FY 95, and requested \$25 million in termination expenses, a decrease of over \$200 million from historic levels for this program. Congress appropriated \$70 million for this program in FY 95. The Administration's FY 96 request in \$100 million.

I asked the Natural Resources Conservation Service to provide me with specific information about the watershed and flood prevention program. The written response to one of my submitted questions stated that a thorough review of the present program and outstanding commitments to sponsors was being conducted; however, the response states that the agency does not have a project-by-project listing of state and local contributions to watershed and flood prevention programs.

Question: Please explain how a thorough review of these programs can occur without this information. Please provide for the record the information which is available regarding a list of these projects, the amount of funds obligated to date, and the funds needed to complete them, indicating how much was needed to complete them at the end of FY 94.

Answer: The project-by-project contributions by state and local sponsors to watershed projects was under development at the time of the original response. This data has been collected for all Public Law 566 projects and is now in a National Headquarters data base. The PL-534 data has historically been maintained in the states. We are currently gathering these data and will be able to report in the same detail by FY 97.

The following tables contain the complete PL-566 data and what we have to date on the PL-534 projects. Both sets of data have the same identifying headings: "tc" is the total cost of the project as planned; "tfc" is the total federal cost (PL-566 or PL-534 funds); "oblig" is the federal funds obligated to date; "local" is the sponsors portion of the total cost; and "future" is the remaining federal obligation.

[The information follows:]

WATERSHED PROTECTION AND FLOOD PREVENTION
(PUBLIC LAW 83-566) PROJECTS

st proj name	tc	tfc	oblig	local	future
AL 2016 BIG NANCE CREEK	3,797,311	2,962,311	2,679,311	835,000	283,000
AL 2042 CAMP BRANCH	2,164,400	1,804,600	934,541	359,800	870,059
AL 2044 CHANDLER MOUNTAIN	1,376,145	1,238,145	1,153,145	138,000	85,000
AL 2020 CHOCCOLOCCO CREEK	15,298,421	12,218,421	7,183,421	3,080,000	5,035,000
AL 2043 DRY CREEK	2,044,286	1,927,286	1,014,286	117,000	913,000
AL 2033 DYNNE CREEK	5,184,553	2,899,553	2,071,553	2,285,000	828,000
AL 2041 HARRISON MILL-PANTHE	2,540,630	1,900,630	1,582,630	640,000	318,000
AL 2039 KELLY-PRESTON MILL C	1,837,265	1,223,265	1,017,265	614,000	206,000
AL 2047 MEMPHIS-NOXUBEE	413,214	249,214	47,214	164,000	202,000
AL 2051 NORTHEAST YELLOW RIV	1,907,500	1,720,200		187,300	1,720,200
AL 2045 PATES CREEK	2,003,818	1,113,818	553,818	890,000	560,000
AL 2010 POWELL CREEK	4,176,779	3,654,779	2,509,779	522,000	1,145,000
AL 2048 SHORT-SCARHAM CREEKS	4,578,813	3,341,813	287,813	1,237,000	3,054,000
AL 2050 SOUTH SAUTY CREEK	4,677,370	3,387,370	159,370	1,290,000	3,228,000
AL 2049 TOWN CREEK-DEKALB	4,045,227	2,900,227	347,227	1,145,000	2,553,000
AL 2046 WHITEWATER CREEK	3,395,055	1,615,055	977,055	1,780,000	638,000
AL 2036 WILKERSON CREEK	5,323,600	4,212,800	3,964,232	1,110,800	248,568
AR 2027 BIG SLOUGH	584,505	584,505	584,505	0	0
AR 2057 CROW CREEK	617,486	609,486	359,486	8,000	250,000
AR 2059 DUCK CREEK	470,333	457,333	207,333	13,000	250,000
AR 2058 DUNN CREEK	469,959	459,959	209,959	10,000	250,000
AR 2052 FLAT ROCK CREEK	13,562,652	10,212,652	9,960,652	3,350,000	252,000
AR 2036 FOURCHE CREEK	20,638,183	16,372,183	15,169,183	4,266,000	1,203,000

AR 2064 GOULD PORTION OF GRA	1,406,000	1,104,000	0	302,000	1,104,000
AR 2063 LITTLE RED RIVER	8,659,933	4,972,933	2,242,933	3,687,000	2,730,000
AR 2034 NORTH FORK OF OZAN C	5,263,483	4,573,483	3,745,483	690,000	828,000
AR 2053 OZAN CREEKS	13,049,823	10,960,823	4,638,823	2,089,000	6,322,000
AR 2042 POINSETT	18,895,877	17,286,877	11,850,877	1,609,000	5,436,000
AR 2054 SOUTH FORK	7,337,037	6,004,037	4,205,037	1,333,000	1,799,000
AR 2038 SOUTH FOURCHE	18,621,205	17,390,205	10,266,205	1,231,000	7,124,000
AR 2050 UPPER PETIT JEAN	20,105,136	14,420,136	5,276,136	5,685,000	9,144,000
AZ 2006 APACHE JUNCTION-GILB	18,968,987	11,788,987	8,187,987	7,180,000	3,601,000
AZ 2005 BUCKHORN-MESA	37,999,995	23,346,995	19,933,995	14,653,000	3,413,000
AZ 2017 ELOY	10,444,248	5,880,248	2,227,248	4,564,000	3,653,000
AZ 2010 HARQUAHALA VALLEY	25,516,483	23,733,483	22,820,483	1,783,000	913,000
AZ 2018 NEW MAGMA	9,640,468	5,445,468	1,372,468	4,195,000	4,073,000
AZ 2007 WILLIAMS-CHANDLER	48,845,365	39,288,365	36,125,365	9,557,000	3,163,000
CA 2014 BEARDSLEY	40,955,454	38,735,454	33,860,454	2,220,000	4,875,000
CA 2021 CARPINTERIA VALLEY	21,230,073	17,469,073	15,594,073	3,761,000	1,875,000
CA 2006 CENTRAL SONOMA	16,417,415	12,496,415	11,621,415	3,921,000	875,000
CA 2029 CULL CREEK	1,685,343	1,548,343	1,548,343	137,000	0
CA 2032 ELKHORN SLOUGH	3,540,000	2,130,000		1,410,000	2,130,000
CA 2031 INDIAN CREEK	2,101,185	1,711,185	86,185	390,000	1,625,000
CA 2016 LOWER LLAGAS CREEK	45,274,904	26,182,031	25,307,031	19,092,873	875,000
CA 2028 LOWER SILVER CREEK	4,308,521	4,308,521	1,433,521	0	2,875,000
CA 2008 MARSH-KELLOGG CREEK	8,818,058	7,151,058	5,276,058	1,667,000	1,875,000
CA 2026 TEHACHAPI	18,602,435	16,922,435	16,047,435	1,680,000	875,000
CA 2020 UPPER LLAGAS CREEK	9,649,371	3,383,371	708,371	6,266,000	2,675,000
CA 2030 UPPER STONY CREEK	5,230,003	5,230,003	1,255,003	0	3,975,000
CA 2027 WOODLAKE-ANTELOPE VA	3,441,466	3,179,466	2,304,466	262,000	875,000
CO 2021 SHAVANO VALLEY	3,394,308	3,394,308	3,200,308	0	194,000
CO 2022 SPRING CREEK	123,762	123,762	123,762	0	0
CO 2023 TRINIDAD LAKE NORTH	952,947	952,947	663,947	0	289,000
CO 2020 WOLF CREEK-HIGHLANDS	554,272	554,272	554,272	0	0
CT 2011 MILL-HORSE BROOK	5,388,556	4,958,556	533,556	380,000	4,425,000
CT 2008 NORWALK RIVER	7,629,538	2,429,538	1,354,538	5,200,000	1,075,000
CT 2005 SOUTH BRANCH PARK RI	43,704,401	29,134,401	28,749,401	14,570,000	385,000
CT 2012 YANTIC RIVER	6,843,390	5,381,390	1,936,390	1,462,000	3,445,000
DE 2006 INDIAN RIVER BAY	3,751,202	3,301,202	1,951,202	450,000	1,350,000
DE 2005 LOVE CREEK	20,668	20,668	20,668	0	0
DE 2003 MARSHHOPE CREEK	9,474,803	9,474,803	9,474,803	0	0
DE 2004 UPPER CHOPTANK RIVER	10,747,322	10,747,322	10,747,322	0	0
FL 2025 AUCILLA RIVER	1,247,648	1,167,648	929,648	80,000	238,000
FL 2021 EAST PITTMAN CREEK	1,647,555	1,512,555	1,464,555	135,000	48,000
FL 2027 NORTH EAST MIDDLE SU	1,568,000	1,088,000	0	480,000	1,088,000
FL 2029 NORTH WEST MIDDLE SU	1,664,000	1,094,000	0	570,000	1,094,000
FL 2017 POND CREEK	2,574,259	2,509,259	2,461,259	65,000	48,000
FL 2030 SOUTH EAST MIDDLE SU	1,458,000	1,043,000	0	415,000	1,043,000
FL 2028 SOUTH WEST MIDDLE SU	1,513,000	1,088,000	0	425,000	1,088,000
FL 2026 SPRING CREEK	2,688,519	2,549,519	1,996,519	139,000	553,000
FL 2024 UPPER SHOAL RIVER	1,700,755	1,660,755	1,552,755	40,000	108,000
FL 2022 WEST FORK COLDWATER	642,539	642,539	642,539	0	0
GA 2064 BEAVER CREEK	2,387,636	1,802,636	1,747,636	585,000	55,000
GA 2033 BEAVERDAM CREEK	1,982,295	1,412,295	1,357,295	570,000	55,000
GA 2044 BIG CEDAR CREEK	14,522,600	11,382,600	6,587,600	3,140,000	4,795,000
GA 2066 CASON BRANCH-DUHART	525,436	455,436	400,436	70,000	55,000
GA 2073 FIVE POINTS AREA	5,039,027	4,089,027	584,027	950,000	3,505,000
GA 2067 HORSE CREEK	602,739	402,739	287,739	200,000	115,000
GA 2068 LITTLE RIVER	1,778,350	1,468,350	1,153,350	310,000	315,000
GA 2043 LITTLE SANDY CREEK &	7,311,219	4,771,219	4,716,219	2,540,000	55,000
GA 2035 LOWER LITTLE TALLAPO	11,300,003	10,468,003	7,663,003	832,000	2,805,000
GA 2023 MIDDLE FORK BROAD RI	3,896,041	3,646,041	1,067,041	250,000	2,579,000
GA 2059 NORTH OCONEE RIVER	994,279	594,279	519,279	400,000	75,000
GA 2041 PINE LOG TRIBUTARY	12,589,646	11,838,492	1,226,954	751,154	10,611,538
GA 2071 PISCOLA CREEK	3,589,028	2,689,028	584,028	900,000	2,105,000
GA 2042 SALLACOA CREEK AREA	9,979,941	9,599,941	4,199,941	380,000	5,400,000
GA 2065 SHOAL CREEK	1,350,379	1,250,379	1,195,379	100,000	55,000
GA 2051 TESNATEE CREEK	9,005,047	8,595,047	2,800,047	410,000	5,795,000
GA 2070 TURKEY CREEK	374,095	314,095	139,095	60,000	175,000
GA 2069 UPPER FIFTEEN-MILE C	418,986	318,986	133,986	100,000	185,000
HI 2007 HONOLUA	19,210,633	19,160,633	16,460,633	50,000	2,700,000
HI 2006 KAHALUU	19,919,226	19,819,226	16,459,226	100,000	3,360,000
HI 2011 LAHAINA	2,520,000	2,450,000	0	70,000	2,450,000
HI 2008 WAILUKU-ALENAIO	1,477,027	1,457,027	1,257,027	20,000	200,000
HI 2009 WAIMANALO	4,827,818	4,177,818	2,657,818	650,000	1,520,000
HI 2010 WAIHEA-PAUULO	4,762,936	3,692,936	122,936	1,070,000	3,570,000
IA 2053 A&T LONG BRANCH	1,548,581	1,528,581	997,581	20,000	531,000
IA 2010 BADGER CREEK	4,927,911	4,927,911	4,927,911	0	0
IA 2027 BLOCKTON	1,752,193	1,752,193	1,752,193	0	0

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IA 2049 HACKLEBARNEY	2,333,057	2,313,057	1,782,057	20,000	531,000
IA 2050 INDIAN CREEK-VAN BUR	3,977,482	3,977,482	3,977,482	0	0
IA 2057 LITTLE PAINT CREEK	2,164,360	979,600		1,184,760	979,600
IA 2048 LITTLE RIVER	3,782,845	3,782,845	3,782,845	0	0
IA 2054 LONG BRANCH	1,185,384	1,165,384	634,384	20,000	531,000
IA 2056 MILL CREEK	1,358,662	1,318,662	726,662	40,000	592,000
IA 2009 MILL-PICAYUNE CREEK	13,765,604	13,558,604	10,853,604	207,000	2,705,000
IA 2031 MOSQUITO OF HARRISON	5,618,480	5,318,480	4,543,480	300,000	775,000
IA 2039 NORTH PIGEON	3,326,842	3,326,842	3,326,842	0	0
IA 2043 SIMON RUN	1,845,717	1,797,717	839,717	48,000	958,000
IA 2055 SOAP CREEK	6,241,733	5,929,733	2,071,733	312,000	3,858,000
IA 2036 THREE MILE CREEK	7,324,600	6,206,200	5,586,922	1,118,400	619,278
IA 2045 TROUBLESOME CREEK	9,820,438	9,680,438	7,738,438	140,000	1,942,000
IA 2030 TURKEY CREEK	5,378,668	5,303,668	4,443,668	75,000	860,000
IA 2046 TWELVE MILE CREEK	5,448,584	5,323,584	3,608,584	125,000	1,715,000
IA 2051 TWIN PONIES	687,307	687,307	687,307	0	0
IA 2040 WAUBONSIE CREEK	8,575,849	8,085,849	6,750,849	490,000	1,335,000
ID 2021 BEDROCK CREEK	599,970	599,970	128,970	0	471,000
ID 2013 BRUNDAGE	2,993,028	2,993,028	2,292,028	0	701,000
ID 2009 HAZELTON BUTTE	810,755	810,755	759,755	0	51,000
ID 2017 LOWER SAND CREEK	415,460	415,460	354,460	0	61,000
ID 2020 MISSION-LAPWAI CREEK	799,268	799,268	108,268	0	691,000
ID 2015 ROCK CREEK-BIG CANYO	578,573	578,573	527,573	0	51,000
ID 2016 ROCK CREEK-HOUTZ/OUT	623,092	623,092	567,092	0	56,000
ID 2011 ROCK CREEK-ROY EAST	569,966	569,966	538,966	0	31,000
ID 2008 ROCK CREEK-SUBLETT	1,006,441	1,006,441	975,441	0	31,000
ID 2010 ROCK CREEK-SUMMIT	343,036	343,036	302,036	0	41,000
ID 2019 TAMMANY CREEK	717,747	717,747	466,747	0	251,000
ID 2018 TENSED/LOLO	795,426	795,426	734,426	0	61,000
ID 2014 THORN CREEK	1,676,177	1,676,177	1,555,177	0	121,000
ID 2012 UPPER SAND CREEK	475,122	475,122	434,122	0	41,000
IL 2034 ARGYLE LAKE	0	0	0	0	0
IL 2024 ASH-LOOP	1,093,589	933,589	842,589	160,000	91,000
IL 2027 KINKAID LAKE	1,710,994	1,414,994	1,318,994	296,000	96,000
IL 2033 LAKE BLOOMINGTON	3,317,090	2,019,090	168,090	1,298,000	1,851,000
IL 2030 LAKE MATTOON	1,896,477	1,483,477	1,357,477	413,000	126,000
IL 2029 LICK CREEK	1,546,358	1,272,358	1,161,358	274,000	111,000
IL 2025 LITTLE CALUMET RIVER	92,352,551	71,012,551	31,630,551	21,340,000	39,382,000
IL 2031 LOWER DES PLAINES TR	36,523,081	18,209,081	16,403,081	18,314,000	1,806,000
IL 2017 MILL CREEK	12,781,742	9,842,742	9,336,742	2,939,000	506,000
IL 2028 RACCOON LAKE	1,173,357	1,006,357	910,357	167,000	96,000
IL 2026 SPRING LAKE	1,388,962	1,122,962	1,021,962	266,000	101,000
IL 2032 UPPER CRAB ORCHARD C	6,151,578	5,461,578	2,770,578	690,000	2,691,000
IL 2023 UPPER SALT CREEK	58,273,673	40,339,673	40,248,673	17,934,000	91,000
IN 2040 HONEY CREEK	3,940,286	3,390,286	297,286	550,000	3,093,000
IN 2033 JORDAN CREEK	5,624,610	5,594,610	5,231,610	30,000	363,000
IN 2038 MARIAH CREEK	2,478,580	2,092,580	1,064,580	386,000	1,028,000
IN 2007 MIDDLE FORK OF ANDER	9,919,266	9,269,266	3,201,266	650,000	6,068,000
IN 2017 MUDDY FORK OF SILVER	10,526,127	9,276,127	2,243,127	1,250,000	7,033,000
IN 2039 PIGEON CREEK	1,618,913	684,913	69,913	934,000	615,000
IN 2020 UPPER BIG BLUE RIVER	13,236,582	13,071,582	12,088,582	165,000	983,000
KS 2048 BIG CREEK	2,476,102	2,476,102	2,476,102	0	0
KS 2059 DIAMOND CREEK	6,182,640	3,374,162	1,286,640	2,808,478	2,087,522
KS 2056 DRY CREEK	4,440,543	1,748,065	655,543	2,692,478	1,092,522
KS 2045 EAST SECTOR WHITEWAT	2,782,188	2,692,188	1,314,188	90,000	1,378,000
KS 2061 ELK CREEK	16,216,393	13,404,393	6,979,393	2,812,000	6,425,000
KS 2058 GRASSHOPPER-COAL CRE	9,207,212	8,755,212	5,137,212	452,000	3,618,000
KS 2038 LOWER ELK RIVER	8,437,560	8,292,560	6,694,560	145,000	1,598,000
KS 2041 LYONS CREEK	7,532,593	7,215,593	4,622,593	317,000	2,593,000
KS 2060 MIDDLE CREEK (MORRIS	3,868,272	3,789,272	2,371,272	79,000	1,418,000
KS 2050 MIDDLE WALNUT	2,355,297	2,355,297	2,355,297	0	0
KS 2031 NORTH BLACK VERMILLI	11,243,095	10,702,095	7,369,095	541,000	3,333,000
KS 2047 NORTH SECTOR UPPER W	6,828,884	6,643,884	4,705,884	185,000	1,938,000
KS 2064 NORTH-MIDDLE FORKS W	4,394,898	3,706,898	155,898	688,000	3,551,000
KS 2067 PONY CREEK	3,822,659	3,058,659	118,659	764,000	2,940,000
KS 2063 ROY'S CREEK	2,022,969	1,926,969	868,969	96,000	1,058,000
KS 2062 SOUTH FORK	3,701,426	3,581,426	1,778,426	120,000	1,803,000
KS 2065 SOUTH FORK WOLF	5,838,840	5,030,840	1,374,840	808,000	3,656,000
KS 2035 SPILLMAN CREEK	5,868,782	5,765,782	4,337,782	103,000	1,428,000
KS 2066 SQUAW CREEK LOWER WO	5,926,975	4,680,975	577,975	1,246,000	4,103,000
KS 2032 UPPER BLACK VERMILLI	7,918,572	7,807,572	6,395,572	111,000	1,412,000
KS 2039 UPPER SALT CREEK	14,170,773	14,170,773	14,170,773	0	0
KS 2044 WEST SECTOR WHITEWAT	4,477,590	4,397,590	3,089,590	80,000	1,308,000
KS 2051 WET WALNUT NO. 1	4,193,023	4,144,023	2,951,023	49,000	1,193,000
KS 2052 WET WALNUT NO. 2	9,567,286	9,387,286	6,964,286	180,000	2,423,000
KS 2053 WET WALNUT NO. 3	8,634,273	8,414,273	6,191,273	220,000	2,223,000

KY 2048 BACON CREEK	1,162,219	1,162,219	1,162,219	0	0
KY 2023 BIG MUDDY CREEK	3,752,230	3,752,230	2,961,230	0	791,000
KY 2049 BOONE FORK	7,436,180	5,458,580		1,977,600	5,458,580
KY 2045 BRASHEAR'S CREEK	337,014	337,014	208,014	0	129,000
KY 2046 CANE VALLEY	837,754	837,754	499,754	0	338,000
KY 2018 CANEY CREEK	10,914,182	10,914,182	10,914,182	0	0
KY 2007 CANOE CREEK	75,157	75,157	75,157	0	0
KY 2043 EAST AND MIDDLE FORK	604,664	604,664	322,664	0	282,000
KY 2021 EAST FORK OF POND RI	10,870,750	10,870,750	10,655,750	0	215,000
KY 2044 FALL CREEK	749,097	749,097	485,097	0	264,000
KY 2042 HIGHLAND CREEK	4,328,557	4,328,557	2,672,557	0	1,656,000
KY 2040 LITTLE AND MIDDLE PI	755,611	755,611	755,611	0	0
KY 2037 NORTH FORK NOLIN RIV	3,310,772	3,310,772	2,787,772	0	523,000
KY 2009 OBION CREEK	1,708,496	1,708,496	1,708,496	0	0
KY 2041 PIGEON ROOST CREEK	1,801,310	1,801,310	1,001,310	0	800,000
KY 2035 RED LICK CREEK	3,481,093	3,481,093	3,481,093	0	0
KY 2027 SHORT CREEK	2,039,700	2,039,700	2,039,700	0	0
KY 2047 SOUTH FORK OF LITTLE	325,727	325,727	325,727	0	0
KY 2039 STEWART CREEK	3,219,102	3,219,102	3,219,102	0	0
KY 2029 UPPER TRADEWATER RIV	2,874,978	2,874,978	2,874,978	0	0
KY 2032 WEST FORK OF MAYFIELD	8,041,048	8,041,048	4,011,048	0	4,030,000
LA 2029 AVOYELLES-ST. LANDRY	356,384	356,384	356,384	0	0
LA 2041 BAYOU MALLET	3,319,216	2,919,216	1,433,216	400,000	1,486,000
LA 2045 BAYOU PENCHANT-LAKE	1,231,627	731,627	55,627	500,000	676,000
LA 2043 BUNDICK CREEK	400,670	400,670	400,670	0	0
LA 2024 CENTRAL MADISON	1,704,000	868,975	868,975	835,025	0
LA 2049 CENTRAL RICHLAND	3,005,900	1,822,100		1,183,800	1,822,100
LA 2018 COCODRIE-GRAND LOUIS	408,530	408,530	408,530	0	0
LA 2019 CYPRESS-BLACK BAYOU	12,532,371	12,372,371	11,386,371	160,000	986,000
LA 2042 FIFTH W'RD	1,453,577	855,668	855,668	597,909	0
LA 2048 MIDDLE TANGIPAHOA	1,142,012	992,012	326,012	150,000	666,000
LA 2047 SICILY ISLAND	57,798	57,798	57,798	0	0
LA 2046 UPPER VERMILION BAYO	1,706,201	1,606,201	100,201	100,000	1,506,000
LA 2027 WALNUT-ROUNDWAY	18,420,900	9,654,475	1,340,577	8,766,425	8,333,898
LA 2030 WEST CARROLL	10,014,862	10,014,862	10,014,862	0	0
LA 2044 WEST FORK BAYOU L'OU	4,198,487	2,498,487	122,487	1,700,000	2,376,000
MA 2001 BAITING BROOK	5,108,386	5,038,386	4,138,386	70,000	900,000
MA 2010 CLAM RIVER	6,926,983	6,856,983	3,736,983	70,000	3,120,000
MA 2004 SU-AS-CO	10,426,461	10,371,461	9,366,461	55,000	1,005,000
MA 2007 UPPER QUABOAG RIVER	7,096,159	4,474,354	4,474,354	2,621,805	0
MA 2012 WASHINGTON MOUNTAIN	9,905,633	9,885,633	8,560,633	20,000	1,325,000
MD 2013 GOLOSBORO	1,225,546	1,225,546	1,225,546	0	0
MD 2021 LINGANORE CREEK	2,990,741	2,502,741	1,548,741	488,000	954,000
MD 2019 UPPER CHESTER RIVER	2,341,910	2,341,910	2,341,910	0	0
MD 2020 WEST AND RHODE RIVER	211,623	211,623	211,623	0	0
ME 2018 KENDUSKEAG STREAM	2,559,508	1,906,508	1,520,508	653,000	386,000
ME 2019 LONG-CROSS LAKES	2,779,246	863,246	527,246	1,916,000	336,000
ME 2020 MEDUXNEAG RIVER	3,138,000	1,074,000	0	2,064,000	1,074,000
ME 2002 PRESQUE ISLE STREAM	2,755,082	2,750,082	2,679,082	5,000	71,000
ME 2021 UPPER PISCATAUQUIS RI	1,255,800	941,900		313,900	941,900
MI 2026 BARAGA VILLAGE	1,305,646	1,212,646	845,646	93,000	367,000
MI 2023 BEAR RIVER	2,440,666	2,290,666	1,796,666	150,000	494,000
MI 2024 ELK RIVER	2,802,567	2,348,567	1,052,567	454,000	1,296,000
MI 2027 MUD CREEK	800,636	628,636	40,636	172,000	588,000
MI 2025 SOUTH BRANCH KAWKAWL	1,055,362	850,362	241,362	205,000	609,000
MN 2020 BURNHAM CREEK	6,486,470	6,037,470	5,406,470	449,000	631,000
MN 2018 CANBY CREEK	8,347,027	7,322,027	6,691,027	1,025,000	631,000
MN 2004 COON CREEK	116,919	116,919	116,919	0	0
MN 2021 KANARANZI-LITTLE ROC	6,276,040	4,686,040	2,023,040	1,590,000	2,663,000
MN 2019 SOUTH ZUMBRO	22,489,143	20,191,143	17,800,143	2,298,000	2,391,000
MO 2027 BIG CREEK-HURRICANE	15,944,491	15,429,491	2,304,491	515,000	13,125,000
MO 2002 EAST FORK OF BIG CRE	6,570,642	6,160,642	5,770,642	410,000	390,000
MO 2029 EAST LOCUST CREEK	13,048,783	11,826,783	4,187,783	1,222,000	7,639,000
MO 2032 EAST YELLOW CREEK	11,357,318	10,447,318	27,318	910,000	10,420,000
MO 2026 GRASSY CREEK	5,097,097	4,697,097	1,797,097	400,000	2,900,000
MO 2011 GRINSTONE-LOST-MUDD	16,576,096	13,766,096	12,736,096	2,810,000	1,030,000
MO 2023 LITTLE WYACONDA-SUGA	485,500	485,500	485,500	0	0
MO 2020 LOWER LITTLE BLACK	3,876,892	3,246,892	1,896,892	630,000	1,350,000
MO 2033 MONITEAU CREEK	7,152,273	6,612,273	109,273	540,000	6,503,000
MO 2021 MOZINGO CREEK	13,242,964	6,542,964	6,442,964	6,700,000	100,000
MO 2031 TOWN BRANCH	1,528,659	713,659	13,659	815,000	700,000
MO 2025 TROUBLESOME CREEK	9,481,603	8,761,603	4,911,603	720,000	3,850,000
MO 2019 UPPER LITTLE BLACK	10,803,144	10,583,144	10,483,144	220,000	100,000
MO 2030 UPPER LOCUST CREEK	20,620,515	19,680,515	1,885,515	940,000	17,795,000
MO 2028 WEST FORK OF BIG CRE	25,635,239	23,275,239	6,755,239	2,360,000	16,520,000
MO 2012 WILLOW-CRAVENS	6,076,557	5,716,557	3,686,557	360,000	2,030,000

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MS 2056	BAYOU PIERRE	720,987	343,987	178,987	377,000	165,000
MS 2037	BIG CREEK	8,537,580	7,626,580	4,763,580	911,000	2,863,000
MS 2043	BOX CREEK	82,414	82,414	82,414	0	0
MS 2042	BROWNS CREEKS	242,687	242,687	242,687	0	0
MS 2040	CHUNKY RIVER	9,113,762	8,416,762	7,597,762	697,000	819,000
MS 2020	CHUQUATONCHEE CREEK	8,205,661	6,351,661	3,707,661	1,854,000	2,644,000
MS 2046	COPIAH CREEK	2,583,664	2,130,664	1,375,664	453,000	755,000
MS 2028	DRY CREEK	977,771	897,771	772,771	80,000	125,000
MS 2062	DRY CREEK(COLUMBIA)	393,700	380,900		12,800	380,900
MS 2063	HAMBRICK	568,500	201,000		367,500	201,000
MS 2029	HOLLIDAY CREEK	1,146,256	1,036,256	786,256	110,000	250,000
MS 2031	HOUKA CREEK	136,209	136,209	136,209	0	0
MS 2061	LONG BEACH	2,996,434	2,446,434	111,434	550,000	2,335,000
MS 2052	MANTACHIE; BOGUE FAL	156,568	156,568	156,568	0	0
MS 2054	OKATOMA CREEK	1,476,144	1,150,144	1,025,144	326,000	125,000
MS 2007	SECOND CREEK	4,875,986	4,665,986	3,640,986	210,000	1,025,000
MS 2059	SOUTH DELTA	5,639,838	4,029,838	1,850,838	1,610,000	2,179,000
MS 2051	SOWASHEE CREEK	16,760,702	13,609,702	8,313,702	3,151,000	5,296,000
MS 2024	STANDING PINE CREEK	3,277,549	2,893,549	2,768,549	384,000	125,000
MS 2032	TALLAHASIA CREEK	11,678,358	10,763,358	10,638,358	915,000	125,000
MS 2021	TOWN CREEK	49,219,839	41,813,839	12,524,839	7,406,000	29,289,000
MS 2025	TUSCUMBIA RIVER	21,389,059	16,283,059	9,507,059	5,106,000	6,776,000
MS 2045	UPPER LEAF RIVER	7,612,509	6,011,509	1,866,509	1,601,000	4,145,000
MT 2014	BOULDER RIVER	323,207	323,207	323,207	0	0
MT 2016	LOWER BIRCH CREEK	8,429,695	7,957,695	6,767,695	472,000	1,190,000
MT 2019	MILL CREEK	3,178,597	3,178,597	3,178,597	0	0
MT 2018	MUDDY CREEK(NORTHEAS	613,090	613,090	613,090	0	0
MT 2020	PASTURE CREEK	0	0	0	0	0
MT 2017	SAF CREEK	352,306	352,306	352,306	0	0
MT 2021	THIRTYMILE CREEK	2,161,393	1,841,393	38,393	320,000	1,803,000
NC 2060	BIG AND DOUBLE CREEK	225,590	200,590	36,590	25,000	164,000
NC 2063	BLACK CREEK	2,477,070	1,720,930		756,140	1,720,930
NC 2025	CRABTREE CREEK	12,397,491	11,947,491	11,608,491	450,000	339,000
NC 2003	DEEP CREEK (YADKIN)	1,356,574	1,356,574	1,356,574	0	0
NC 2057	INDIAN; HOWARDS AND	613,559	613,559	613,559	0	0
NC 2055	LANES CREEK	763,140	763,140	763,140	0	0
NC 2047	LIMESTONE CREEK	4,093,214	3,743,214	3,079,214	350,000	664,000
NC 2037	LITTLE YADKIN RIVER	3,127,282	3,027,282	2,638,282	100,000	389,000
NC 2061	LOWER LITTLE & SOUTH	0	0	0	0	0
NC 2054	RAMSEUR RESERVOIR	654,024	574,024	335,024	80,000	239,000
NC 2056	RICHARDSON CREEK	832,697	832,697	832,697	0	0
NC 2053	SANDY CREEK	0	0	0	0	0
NC 2059	SANDY RUN CREEK	857,258	607,258	378,258	250,000	229,000
NC 2045	SECOND BROAD RIVER	10,763,490	9,963,490	9,224,490	800,000	739,000
NC 2028	STEWARTS CREEK-LOVIL	11,347,871	10,747,871	9,678,871	600,000	1,069,000
NC 2030	SWAN QUARTER	3,061,768	3,011,768	2,822,768	50,000	189,000
NC 2013	TOWN FORK CREEK	9,422,040	7,222,040	3,858,040	2,200,000	3,364,000
NC 2058	UPPER CONTENTNEA CRE	2,782,280	1,783,640		998,640	1,783,640
ND 2023	BELFIELD	2,265,400	2,094,000		171,400	2,094,000
ND 2014	MIDDLE BRANCH-PARK R	8,257,500	6,685,300	2,049,234	1,572,200	4,636,066
ND 2021	MUSKRAT LAKE BASIN	650,438	544,438	422,438	106,000	122,000
ND 2017	SQUARE BUTTE CREEK	5,936,236	5,541,236	3,082,236	395,000	2,459,000
ND 2018	STARKWEATHER	69,682	69,682	69,682	0	0
ND 2022	TAYLOR	2,182,900	941,000	0	1,241,900	941,000
ND 2019	UPPER TURTLE RIVER	9,918,362	8,223,362	6,837,362	1,695,000	1,386,000
NE 2040	AOWA CREEK	7,778,534	6,950,534	4,910,534	828,000	2,040,000
NE 2052	BALLS BRANCH	920,719	920,719	920,719	0	0
NE 2047	BLACKWOOD CREEK	4,378,963	4,281,963	3,911,963	97,000	370,000
NE 2049	BONE CREEK	1,356,261	1,353,261	1,256,261	3,000	97,000
NE 2055	EAST-WEST-DRY MAPLE	4,585,899	4,571,899	1,476,899	14,000	3,095,000
NE 2016	GERING VALLEY	8,628,575	8,096,575	6,429,575	532,000	1,667,000
NE 2039	LOWER MEDICINE CREEK	5,130,785	4,555,785	1,793,785	575,000	2,762,000
NE 2056	MIDDLE BIG NEMAH	2,508,906	1,796,906	321,906	712,000	1,475,000
NE 2048	MIDDLE FORK MAPLE CR	2,709,048	2,704,048	2,482,048	5,000	222,000
NE 2036	PAPILLION CREEK	6,648,395	4,758,395	3,299,395	1,890,000	1,459,000
NE 2051	SOUTH BRANCH LITTLE	9,016,866	8,266,866	5,601,866	750,000	2,665,000
NE 2050	STEVENS-CALLAHAN(CAM	3,759,360	3,756,360	2,209,360	3,000	1,547,000
NE 2053	SWAN CREEK	7,689,890	6,852,890	5,561,890	837,000	1,291,000
NE 2043	TEKAMAH-MUD CREEK	3,773,158	3,542,158	3,445,158	231,000	97,000
NE 2038	UPPER MEDICINE CREEK	1,753,821	1,753,821	1,753,821	0	0
NE 2054	WOLF-WILDCAT CREEK	4,252,779	3,878,779	3,351,779	374,000	527,000
NH 2006	DEAD RIVER	2,830,684	2,320,684	2,160,684	510,000	160,000
NJ 2010	ASSUNPINK CREEK	50,606,223	34,598,223	33,693,223	16,008,000	905,000
NJ 2013	FURNACE BROOK	1,781,838	1,476,838	1,036,838	305,000	440,000
NJ 2016	NAVESINK	1,210,873	1,003,873	593,873	207,000	410,000
NM 2028	COTTONWOOD-WALNUT CR	31,553,778	30,581,778	21,033,778	972,000	9,548,000

NM 2027 EAGLE-TUMBLEWEED DRA	29,528,940	22,028,940	20,610,940	7,500,000	1,418,000
NM 2030 ESPANOLA-RIO CHAMA	18,678,873	16,578,873	70,873	2,100,000	16,508,000
NM 2031 LARGO-AGUA FRIA	698,000	698,000	0	0	698,000
NM 2023 SEBASTIAN MARTIN-BLA	6,594,876	6,594,876	6,594,876	0	0
NM 2026 T OR C WILLIAMSBURG	21,353,611	18,353,611	9,935,611	3,000,000	8,418,000
NM 2029 ZUNI PUEBLO	19,812,315	16,812,315	294,315	3,000,000	16,518,000
NV 2006 EAST WALKER	381,192	379,192	344,192	2,000	35,000
NV 2007 EVANS CREEK	2,307,000	2,220,000		87,000	2,220,000
NY 2012 BATAVIA KILL	3,856,368	3,856,368	3,856,368	0	0
NY 2027 BEAVER BROOK	0	0	0	0	0
NY 2022 BLIND BROOK	15,653	15,653	15,653	0	0
NY 2021 BRANDYWINE CREEK	281,353	281,353	281,353	0	0
NY 2002 CONEWANGO CREEK	6,260,046	6,260,046	6,260,046	0	0
NY 2020 DEPOSIT CREEK	6,486,534	6,486,534	6,486,534	0	0
NY 2018 FLINT CREEK	5,591,605	5,591,605	5,591,605	0	0
NY 2003 ISCHUA CREEK	2,647,716	2,647,716	2,647,716	0	0
NY 2019 MILL BROOK	5,659,697	5,559,697	2,560,697	100,000	2,999,000
NY 2009 NANTICOKE CREEK	5,387,309	5,387,309	5,387,309	0	0
NY 2014 NEWTOWN-HOFFMAN CREE	19,111,402	13,111,402	10,772,402	6,000,000	2,339,000
NY 2017 OAK ORCHARD CREEK	3,204,441	3,204,441	3,204,441	0	0
NY 2023 OTISCO LAKE	618,603	618,603	618,603	0	0
NY 2026 TOMHANNOCK RESERVOIR	2,088,828	2,088,828	844,828	0	1,244,000
NY 2025 VIRGIL CREEK	3,946,658	3,821,658	122,658	125,000	3,699,000
OH 2027 FOUR MILE CREEK	3,638,000	2,773,000	0	865,000	2,773,000
OH 2024 KINGS CREEK	427,066	427,066	427,066	0	0
OH 2019 NORTH HOCKING RIVER	2,646,411	2,366,411	704,411	280,000	1,662,000
OH 2015 PRAIRIE-HOAGLIN BR.	11,521,265	10,926,265	7,544,265	595,000	3,382,000
OH 2018 RATTLESNAKE CREEK	450,382	450,382	450,382	0	0
OH 2009 RUSH CREEK	25,454,462	24,934,462	23,167,462	320,000	1,767,000
OH 2017 SHORT CREEK	9,794,588	7,844,588	2,212,588	1,950,000	5,632,000
OH 2020 SOUTH FORK LICKING R	10,275,759	6,515,759	163,759	3,760,000	6,352,000
OH 2028 UPPER BLANCHARD RIVE	1,257,000	932,000	0	325,000	932,000
OH 2021 UPPER KILLBUCK CREEK	3,679,894	919,894	337,894	2,760,000	582,000
OH 2025 UPPER MAD RIVER	494,469	494,469	494,469	0	0
OH 2026 UPPER TIFFIN	2,838,361	2,188,361	1,186,361	650,000	1,002,000
OH 2023 WILLS CREEK	2,921,996	2,601,996	1,524,996	320,000	1,077,000
OK 2056 BRUSHY-PEACEABLE CRE	19,302,330	15,876,330	7,639,330	3,426,000	8,237,000
OK 2071 CAMBELL CREEK	953,010	901,010	58,010	52,000	843,000
OK 2068 CARNEY CREEK	781,200	746,200	68,200	35,000	678,000
OK 2047 COTTON-COON-MISSION	9,130,208	6,855,208	5,837,208	2,275,000	1,018,000
OK 2061 COW CREEK	14,835,822	11,289,822	9,537,822	3,546,000	1,752,000
OK 2072 DEER CREEK	4,036,176	2,971,176	2,268,176	1,065,000	703,000
OK 2073 DRY CREEK	5,090,790	4,635,790	1,239,790	455,000	3,396,000
OK 2059 HOYLE CREEK	1,153,853	1,033,853	240,853	120,000	793,000
OK 2051 JACK CREEK	5,475,431	3,905,431	3,197,431	1,570,000	708,000
OK 2065 KICKAPOO NATIONS	24,566,156	18,059,156	12,906,156	6,507,000	5,153,000
OK 2012 LEADER-MIDDLE CLEAR	4,114,863	2,104,863	1,871,863	2,010,000	233,000
OK 2076 LITTLE BEAVER CREEK	4,104,000	3,581,000	0	523,000	3,581,000
OK 2058 LOST-DUCK CREEKS	13,120,523	11,265,523	9,142,523	1,855,000	2,123,000
OK 2034 LOWER BAYOU	11,316,479	8,881,479	6,573,479	2,435,000	2,308,000
OK 2052 LOWER BLACK BEAR CRE	10,370,836	8,257,836	6,029,836	2,113,000	2,228,000
OK 2030 LOWER CLEAR BOGGY CR	13,320,017	9,418,017	8,249,017	3,902,000	1,169,000
OK 2053 LOWER RED ROCK CREEK	10,213,526	8,333,526	985,526	1,880,000	7,348,000
OK 2075 LUGERT-ALTUS	4,865,883	3,115,883	820,883	1,750,000	2,295,000
OK 2064 MCKINNEY BUZZARD	1,079,495	1,014,495	221,495	65,000	793,000
OK 2074 NORTH DEER CREEK	9,603,090	4,133,090	3,180,090	5,470,000	953,000
OK 2054 OKFUSKEE TRIBUTARIES	14,995,012	10,000,012	8,017,012	4,995,000	1,983,000
OK 2066 ROBINSON CREEK	7,893,062	5,538,062	3,835,062	2,355,000	1,703,000
OK 2031 SALT-CAMP CREEK	6,840,903	4,165,903	2,527,903	2,675,000	1,638,000
OK 2005 SANDY CREEK	7,018,062	4,243,062	4,010,062	2,775,000	233,000
OK 2029 STILLWATER CREEK	22,747,195	16,427,195	11,834,195	6,320,000	4,593,000
OK 2028 TRI-COUNTY TURKEY CR	11,749,456	8,104,456	6,746,456	3,645,000	1,358,000
OK 2070 TURKEY CREEK	4,208,844	4,010,844	123,844	198,000	3,887,000
OK 2033 UPPER BAYOU	6,807,531	4,262,531	3,959,531	2,545,000	303,000
OK 2014 UPPER BLACK BEAR CRE	17,093,958	11,407,958	11,120,958	5,686,000	287,000
OK 2022 UPPER BLUE RIVER	14,134,483	11,824,483	256,483	2,310,000	11,568,000
OK 2040 UPPER ELK CREEK	20,010,727	14,459,727	12,578,727	5,551,000	1,881,000
OK 2063 UPPER MUDDY BOGGY CR	15,738,574	13,528,574	12,095,574	2,210,000	1,433,000
OK 2018 UPPER RED ROCK CREEK	13,650,003	10,045,003	7,147,003	3,605,000	2,898,000
OK 2027 WATERFALL-GILFORD CR	6,047,976	3,697,976	2,309,976	2,350,000	1,388,000
OK 2077 WILD HORSE CREEK	818,000	793,000	0	25,000	793,000
OR 2022 DEADMAN-BULLARD	2,862,382	2,777,382	49,382	85,000	2,728,000
OR 2019 DRY CREEK	1,571,494	1,271,494	803,494	300,000	468,000
OR 2020 NORTH SIDE BIG NESTU	1,091,166	841,166	373,166	250,000	468,000
OR 2021 UPPER STAGE GULCH	1,217,893	947,893	479,893	270,000	468,000
PA 2012 BRANDYWINE CREEK	25,720,878	18,790,878	16,411,878	6,930,000	2,379,000

PA 2027 CEDAR RUN	645,760	645,760	611,760	0	34,000
PA 2024 CLOVER CREEK	1,060,445	740,445	696,445	320,000	44,000
PA 2023 CROSS CREEK	8,803,444	8,513,444	8,479,444	290,000	34,000
PA 2021 JACOBS CREEK	3,404,042	3,124,042	2,685,042	280,000	439,000
PA 2029 LAUREL HILL CREEK	637,261	577,261	438,261	60,000	139,000
PA 2014 LITTLE SHENANGO RIVE	17,577,816	15,177,816	13,283,816	2,400,000	1,894,080
PA 2020 NESHAMINY CREEK	40,742,020	17,092,020	10,708,020	23,650,000	6,384,000
PA 2032 OWEN RUN	5,134,000	2,489,000	0	2,645,000	2,489,000
PA 2031 PITCHPINE RUN	2,359,000	2,159,000	0	200,000	2,159,000
PA 2025 ROCK CREEK	730,968	398,968	364,968	332,000	34,000
PA 2028 UPPER TIOGA RIVER	2,334,000	2,134,000	0	200,000	2,134,000
PA 2030 YELLOW CREEK	2,045,496	1,605,496	886,496	440,000	719,000
PB 2002 KAGMAN	3,600,000	2,600,000	0	1,000,000	2,600,000
PB 2001 TALOFOFO VILLAGE	658,941	648,941	598,941	10,000	50,000
PR 2001 ANASCO RIVER	9,134,123	7,316,123	6,696,123	1,818,000	620,000
PR 2003 GUAYANES RIVER	71,636,212	36,587,212	3,519,212	35,049,000	33,068,000
PR 2004 TOA VACA LAKE	1,207,616	1,182,616	442,616	25,000	740,000
RI 2001 AQUIDNECK ISLAND	825,228	780,228	665,228	45,000	115,000
SC 2047 BUSH RIVER-BEAVERDAM	967,414	967,414	967,414	0	0
SC 2058 FRAZIER PARK	573,000	443,000	0	130,000	443,000
SC 2053 LITTLE SALUDA RIVER	189,666	189,666	189,666	0	0
SC 2059 NICHOLS	535,000	478,000	0	57,000	478,000
SC 2054 NORTH FORK EDISTO	241,356	241,356	241,356	0	0
SC 2041 NORTHEAST CALHOUN	800,828	800,828	800,828	0	0
SC 2050 NORTHWEST CHEROKEE	457,957	457,957	457,957	0	0
SC 2035 OOLENOY RIVER	3,629,576	3,479,576	2,788,576	150,000	691,000
SC 2045 PACOLET RIVER	447,030	447,030	447,030	0	0
SC 2055 PICKENS-ANDERSON	214,608	214,608	214,608	0	0
SC 2038 RABON CREEK	7,203,890	7,203,890	7,203,890	0	0
SC 2046 RAFTING CREEK	405,492	405,492	405,492	0	0
SC 2048 SALEM COMMUNITY	2,954,760	2,124,760	1,215,760	830,000	909,000
SC 2044 SALKEHATCHIE RIVER	324,846	324,846	324,846	0	0
SC 2057 SOUTH EDISTO	522,662	522,662	522,662	0	0
SC 2052 THOMPSON-WESTFIELD C	2,293,624	1,683,624	292,624	610,000	1,391,000
SC 2043 UPPER SAVANNAH	701,737	701,737	701,737	0	0
SC 2049 WALLACE	514,931	514,931	514,931	0	0
SC 2051 WEST ORANGEBURG	546,606	546,606	546,606	0	0
TN 2044 BEANS CREEK	1,317,980	1,213,980	636,980	104,000	577,000
TN 2046 BEAVER CREEK	802,257	802,257	221,257	0	581,000
TN 2045 BIG CREEK	1,602,730	1,469,730	699,730	133,000	770,000
TN 2049 BIG LIMESTONE CREEK	1,255,892	1,255,892	230,892	0	1,025,000
TN 2015 CANE CREEK	18,768,098	17,928,098	11,453,098	840,000	6,475,000
TN 2036 HURRICANE CREEK	7,038,934	6,550,934	3,090,934	488,000	3,460,000
TN 2041 MADISON-CYPRESS CREE	1,067,222	1,017,222	517,222	50,000	500,000
TN 2038 MCNAIRY-CYPRESS CREE	17,952,416	16,183,416	8,324,416	1,769,000	7,859,000
TN 2047 NORTH FORK WOLF RIVE	750,284	750,284	161,284	0	589,000
TN 2039 NORTH FORK-FORKED DE	7,116,247	4,345,247	2,130,247	2,771,000	2,215,000
TN 2040 PORTLAND	1,689,835	1,349,835	649,835	340,000	700,000
TN 2035 RED BOILING SPRINGS	7,649,792	7,209,792	5,599,792	440,000	1,610,000
TN 2013 REELFOOT-INDIAN CREE	16,649,558	14,789,558	13,159,558	1,860,000	1,630,000
TN 2043 SPRING CREEK	907,053	817,053	204,053	90,000	613,000
TN 2048 SULPHUR FORK CREEK	965,322	900,322	260,322	65,000	640,000
TN 2034 SWEETWATER CREEK	11,642,847	10,852,847	8,552,847	790,000	2,300,000
TN 2042 WHITE OAK CREEK	550,809	545,809	45,809	5,000	500,000
TX 2066 AQUILLA-HACKBERRY CR	8,830,831	8,795,831	7,984,831	35,000	811,000
TX 2048 ATTOYAC BAYOU	7,317,985	7,190,985	5,299,985	127,000	1,891,000
TX 2097 BIG CREEK(DELTA CO.)	450,677	438,677	47,677	12,000	391,000
TX 2098 BIG CREEK(TRI-COUNTY	4,039,801	3,774,801	203,801	265,000	3,571,000
TX 2096 CADDO CREEK	4,629,395	3,725,395	2,854,395	900,000	871,000
TX 2023 CANEY CREEK	2,105,071	1,734,071	1,343,071	371,000	391,000
TX 2055 CHOCTAW CREEK	24,941,173	18,456,300	12,225,093	6,484,873	6,231,207
TX 2078 CORNUDAS; NORTH AND	7,339,878	5,949,878	4,958,878	1,390,000	991,000
TX 2050 DONAHOE CREEK	2,336,544	1,961,544	1,570,544	375,000	391,000
TX 2074 ECLETO CREEK	16,583,815	5,116,815	4,245,815	11,467,000	871,000
TX 2094 ELM CREEK (1250)	8,530,581	7,934,581	2,743,581	596,000	5,191,000
TX 2087 ELM CREEK (CEN-TEX)	22,750,866	18,663,766	13,681,866	4,087,100	4,981,900
TX 2077 HITSON; C&L AND WASH	21,197,180	17,217,180	16,226,180	3,980,000	991,000
TX 2082 LEONA RIVER	13,229,160	10,245,160	9,854,160	2,984,000	391,000
TX 2095 LOS OLMOES CREEK	401,042	399,042	8,042	2,000	391,000
TX 2099 LOWER AQUILLA-HACKBE	1,208,064	1,106,064	235,064	102,000	871,000
TX 2084 PALUXY RIVER	25,444,319	20,791,319	17,220,319	4,653,000	3,571,000
TX 2044 PINE CREEK	3,572,290	3,002,290	2,611,290	570,000	391,000
TX 2085 RED DEER CREEK	17,227,562	15,498,562	9,306,562	1,729,000	6,192,000
TX 2056 RUSH CREEK	7,329,604	5,930,604	5,539,604	1,399,000	391,000
TX 2040 SALADO CREEK	20,549,315	16,904,632	16,836,855	3,644,683	67,777
TX 2020 SAN DIEGO-ROSITA CRE	10,975,853	9,903,853	9,512,853	1,072,000	391,000

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TX 2100	SULPHUR CREEK(WP)	1,379,764	1,329,764	428,764	50,000	901,000
TX 2024	TEHUACANA CREEK	8,344,951	6,772,951	6,381,951	1,572,000	391,000
TX 2090	THREE MILE AND SULFE	11,006,089	8,819,089	8,428,089	2,187,000	391,000
TX 2101	UPPER NORTH BOSQUE R	0	0	0	0	0
TX 2091	UPPER SAN MARCOS RIV	21,176,312	16,682,312	16,291,312	4,494,000	391,000
UT 2008	BLUE CREEK-HOWELL	7,413,598	7,351,598	6,874,598	62,000	477,000
UT 2015	DRY GULCH-MARTIN LAT	3,771,196	3,406,196	3,323,196	365,000	83,000
UT 2016	SAND WASH	584,099	476,099	398,099	108,000	78,000
UT 2013	WARNER DRAW	9,579,484	6,829,484	6,800,484	2,750,000	29,000
VA 2042	ARARAT RIVER	4,690,848	4,610,848	122,848	80,000	4,488,000
VA 2027	BUFFALO RIVER	10,032,943	8,352,943	3,689,943	1,680,000	4,663,000
VA 2029	BUSH RIVER	15,609,843	14,959,843	11,521,843	650,000	3,438,000
VA 2030	CEDAR RUN	19,913,900	13,409,900	5,738,426	6,504,000	7,671,474
VA 2033	COPPER CREEK	2,364,814	2,364,814	2,126,814	0	238,000
VA 2035	CRIPPLE CREEK	2,234,107	2,109,107	1,646,107	125,000	463,000
VA 2036	HAYS CREEK	2,082,646	1,952,646	1,334,646	130,000	618,000
VA 2041	LICK CREEK	262,847	242,847	54,847	20,000	188,000
VA 2034	LOONEY-MILL CREEK	1,441,710	1,421,710	1,273,710	20,000	148,000
VA 2038	PAMUNKEY RIVER	832,940	712,940	564,940	120,000	148,000
VA 2040	SANDY CREEK	2,178,045	2,028,045	1,415,045	150,000	613,000
VA 2039	THREE CREEK	429,510	429,510	429,510	0	0
VA 2032	UPPER APPOMATTOX RIV	1,196,214	1,196,214	1,098,214	0	98,000
VA 2021	UPPER CLINCH VALLEY	3,837,998	3,807,998	2,509,998	30,000	1,298,000
VA 2037	WATKINS BRANCH	1,738,000	1,348,000	0	390,000	1,348,000
VT 2010	BARTON AND CLYDE RIV	3,995,152	3,165,152	1,439,152	830,000	1,726,000
VT 2007	BLACK RIVER	2,127,929	2,060,929	1,779,929	67,000	281,000
VT 2005	LAPLATE RIVER	2,988,833	2,988,833	2,988,833	0	0
VT 2008	LEMON FAIR RIVER	2,576,266	2,149,266	1,380,266	427,000	769,000
VT 2011	LOWER LAKE CHAMPLAIN	1,143,000	723,000	0	420,000	723,000
VT 2012	LOWER LAMOILLE RIVER	1,183,000	543,000	0	640,000	543,000
VT 2006	LOWER OTTER AND DEAD	3,267,855	3,265,855	3,132,855	2,000	133,000
VT 2009	LOWER WINOOSKI RIVER	1,634,589	1,412,589	966,589	222,000	446,000
VT 2004	UPPER CASTLETON RIVE	1,589,559	1,589,559	1,589,559	0	0
WA 2010	EAST SIDE GREEN RIVE	22,498,859	17,911,859	12,815,859	4,587,000	5,096,000
WA 2017	EAST WENATCHEE	92,024	92,024	92,024	0	0
WA 2005	MARSHLAND	6,429,859	6,229,859	4,393,859	200,000	1,836,000
WA 2023	MOXEE	5,132,500	3,382,500	0	1,750,000	3,382,500
WA 2018	NEWAUKUM	1,426,175	1,426,175	1,190,175	0	236,000
WA 2020	NORTH PINE-SPRING VA	2,031,790	2,003,790	1,777,790	28,000	226,000
WA 2016	PLEASANT VALLEY CREE	2,296,181	2,296,181	2,296,181	0	0
WA 2019	REBEL FLAT CREEK	2,446,557	2,414,557	2,175,557	32,000	239,000
WA 2022	TENMILE CREEK	1,036,000	836,000	0	200,000	836,000
WA 2021	TUCANNOON RIVER	1,945,588	1,645,588	459,588	300,000	1,186,000
WA 2011	WEST SIDE GREEN RIVE	2,299,368	2,299,368	2,299,368	0	0
WI 2033	MOSHER-ANDERSON CREE	1,442,500	1,247,000	0	195,500	1,247,000
WI 2026	PINE RIVER	19,272,080	15,197,080	13,972,080	4,075,000	1,225,000
WI 2017	PLAIN-HONEY CREEK	1,314,761	1,314,761	1,314,761	0	0
WV 2006	BRUSH CREEK	5,655,331	5,655,331	5,655,331	0	0
WV 2017	ELK TWOMILE CREEK	12,161,533	11,351,533	1,754,533	810,000	9,597,000
WV 2030	HEADWATERS OF INDIAN	795,896	795,896	795,896	0	0
WV 2032	HOWARD CREEK	5,136,246	5,136,246	5,136,246	0	0
WV 2028	LITTLE WHITESTICK-CR	13,814,471	13,294,471	1,377,471	520,000	11,917,000
WV 2021	MILL CREEK	29,645,647	29,045,647	21,428,647	600,000	7,617,000
WV 2029	OPEQUON	5,148,942	5,148,942	1,246,942	0	3,902,000
WV 2025	PINEY CREEK-SOAK CRE	10,284,131	10,284,131	10,284,131	0	0
WV 2031	TETER CREEK	454,880	454,880	454,880	0	0
WV 2015	UPPER BUFFALO CREEK	10,215,018	10,215,018	10,215,018	0	0
WV 2026	UPPER MUD RIVER	20,588,028	18,538,028	12,671,028	2,050,000	5,867,000
WV 2016	WHEELING CREEK	45,045,382	45,045,382	45,045,382	0	0
WY 2014	ALLISON DRAW	8,891,000	5,571,000	0	3,320,000	5,571,000

FLOOD CONTROL ACT OF 1994
(PUBLIC LAW 78-534)
PROJECTS

st proj name	tc	tfc	oblig	local	future
IA 7601 LTL SIOUX - AFMCS				0	0
IA 7601 LTL SIOUX - BADGER CREEK				0	0
IA 7601 LTL SIOUX - BARBER HOLLOW				0	0
IA 7601 LTL SIOUX - BIG COON CREEK	826,290	791,529		34,761	791,529
IA 7601 LTL SIOUX - BIG WHISKEY				0	0
IA 7601 LTL SIOUX - BITTER CREEK				0	0
IA 7601 LTL SIOUX - CAMP CREEK				0	0
IA 7601 LTL SIOUX - CLIMBING HILL				0	0
IA 7601 LTL SIOUX - CORWIN-LOGAN				0	0
IA 7601 LTL SIOUX - CRAWFORD CK.				0	0
IA 7601 LTL SIOUX - DEER AND RATHBURN				0	0
IA 7601 LTL SIOUX - DUTCH CREEK				0	0
IA 7601 LTL SIOUX - DUTCH HOLLOW				0	0
IA 7601 LTL SIOUX - EAST MAPLETON				0	0
IA 7601 LTL SIOUX - ELK CREEK				0	0
IA 7601 LTL SIOUX - ELLIOTT CREEK				0	0
IA 7601 LTL SIOUX - GALVA-SHALLER				0	0
IA 7601 LTL SIOUX - GARFIELD				0	0
IA 7601 LTL SIOUX - LAST CHANCE				0	0
IA 7601 LTL SIOUX - LEECH HOLLOW				0	0
IA 7601 LTL SIOUX - LITTLE WHISKEY				0	0
IA 7601 LTL SIOUX - MC ELHANEY				0	0
IA 7601 LTL SIOUX - MILLER CREEK				0	0
IA 7601 LTL SIOUX - MOORHEAD CREEK				0	0
IA 7601 LTL SIOUX - MOVILLE				0	0
IA 7601 LTL SIOUX - ODEBOLT				0	0
IA 7601 LTL SIOUX - PIERSON				0	0
IA 7601 LTL SIOUX - REYNOLDS				0	0
IA 7601 LTL SIOUX - ROCK CREEK				0	0
IA 7601 LTL SIOUX - SMOKEY HOLLOW				0	0
IA 7601 LTL SIOUX - SOUTH GARFIELD				0	0
IA 7601 LTL SIOUX - WEST ALDRICH	163,050	156,250		6,800	156,250
IA 7601 LTL SIOUX - WEST FORK OF BATTLE				0	0
IA 7601 LTL SIOUX - WEST MAPLETON				0	0
IA 7601 LTL SIOUX - WESTSIDE				0	0
IA 7601 LTL SIOUX - WEST WOLF CREEK	710,160	651,010		59,150	651,010
IA 7601 LTL SIOUX - WILLOW ROCK				0	0
IA 7601 LTL SIOUX - WOLF CREEK				0	0
MD 0701 POTOMAC - EVITTS CREEK				0	0
MD 0701 POTOMAC - DIRECT POTOMAC DRAINAGE				0	0
MD 0701 POTOMAC - FIFTEEN MILE CREEK				0	0
MD 0701 POTOMAC - GEORGES CREEK				0	0
MD 0701 POTOMAC - NORTH BRANCH				0	0
MD 0701 POTOMAC - SAVAGE RIVER				0	0
MD 0701 POTOMAC - SIDELING HILL CREEK				0	0
MD 0701 POTOMAC - TOWN CREEK				0	0
MD 0701 POTOMAC - WILLS CREEK				0	0
MS 3301 LTL TALLA - CANE CREEK				0	0
MS 3301 LTL TALLA - CYPRESS & PUSS CUSS				0	0
MS 3301 LTL TALLA - DUNCAN-CANE CREEKS				0	0
MS 3301 LTL TALLA - LTL SPRING-OCHEWALLA CREEKS				0	0
MS 3301 LTL TALLA - LOWER TIPPAN RIVER	9,000,000			9,000,000	0
MS 3301 LTL TALLA - NORTH TIPPAN CREEK	2,700,000			2,700,000	0
MS 3301 LTL TALLA - OAKLIMETER CREEK				0	0
MS 3301 LTL TALLA - OKONATIE CREEK				0	0
MS 3302 YAZOO - ABIACA CREEK	7,250,000			7,250,000	0
MS 3302 YAZOO - ARKABUTLA CREEK				0	0
MS 3302 YAZOO - ASKALMORE CREEK				0	0
MS 3302 YAZOO - BATUPAN BOGUE	14,880,000			14,880,000	0
MS 3302 YAZOO - BEAR CREEK				0	0
MS 3302 YAZOO - BELZONI				0	0
MS 3302 YAZOO - BIG SAND CREEK				0	0
MS 3302 YAZOO - BLACK CREEK	5,500,000			5,500,000	0
MS 3302 YAZOO - BLACK CREEK (DELTA)				0	0
MS 3302 YAZOO - BOLIVAR CREEK				0	0
MS 3302 YAZOO - BROAD SLOUGH				0	0
MS 3302 YAZOO - BRUNSWICK LEVEE				0	0
MS 3302 YAZOO - BUNTYN CREEK				0	0
MS 3302 YAZOO - BYNUM CREEK				0	0
MS 3302 YAZOO - BURNEY BRANCH	1,000,000			1,000,000	0
MS 3302 YAZOO - CANE-MUSSACUNA CKS.	7,250,000			7,250,000	0
MS 3302 YAZOO - COLDWATER RIVER	28,600,000			28,600,000	0
MS 3302 YAZOO - CRENSHAW				0	0
MS 3302 YAZOO - CYPRESS CREEK	1,550,000			1,550,000	0
MS 3302 YAZOO - FIGHTING BAYOU	1,075,000			1,075,000	0
MS 3302 YAZOO - GUM POND				0	0
MS 3302 YAZOO - HAMPTON LAKE				0	0
MS 3302 YAZOO - HICKAHALA CREEK	7,075,000			7,075,000	0

MS 3302 YAZOO - HOFFA CREEK				0	0
MS 3302 YAZOO - HORSE PEN CREEK				0	0
MS 3302 YAZOO - MOTOPHIA CREEK	1,830,000			1,830,000	0
MS 3302 YAZOO - HUBBARD-MURPHREE CREEKS				0	0
MS 3302 YAZOO - HUSHPUCKENA CREEK				0	0
MS 3302 YAZOO - INDIAN CREEK-BOBO BAYOU				0	0
MS 3302 YAZOO - INDIAN CREEK				0	0
MS 3302 YAZOO - JONES BAYOU				0	0
MS 3302 YAZOO - LAKE CORMORANT				0	0
MS 3302 YAZOO - LAKE HENRY				0	0
MS 3302 YAZOO - LEFLORE				0	0
MS 3302 YAZOO - LITTLE MOUND BAYOU				0	0
MS 3302 YAZOO - LONG CREEK	3,615,000			3,615,000	0
MS 3302 YAZOO - LONG LAKE				0	0
MS 3302 YAZOO - LOWER TIPPO BAYOU				0	0
MS 3302 YAZOO - MC IVOR CREEK				0	0
MS 3302 YAZOO - MOON LAKE-PHILLIPS BAYOU				0	0
MS 3302 YAZOO - MURPHY BAYOU				0	0
MS 3302 YAZOO - MURRAY CREEK				0	0
MS 3302 YAZOO - NEW AFRICA				0	0
MS 3302 YAZOO - NEW PORTERS BAYOU				0	0
MS 3302 YAZOO - NORTH TILLATOHA-HUNTER				0	0
MS 3302 YAZOO - NORTH YALOBUSHA RIVER				0	0
MS 3302 YAZOO - NORTHERN DRAINAGE DISTRICT	1,600,000			1,600,000	0
MS 3302 YAZOO - OLDHAM LAKE				0	0
MS 3302 YAZOO - OPOSSUM BAYOU				0	0
MS 3302 YAZOO - OTOUCALOFA CREEK	6,400,000			6,400,000	0
MS 3302 YAZOO - PELUCIA CREEK	3,600,000			3,600,000	0
MS 3302 YAZOO - PERRY CREEK				0	0
MS 3302 YAZOO - PERSIMMON CREEK I				0	0
MS 3302 YAZOO - PERSIMMON CREEK II				0	0
MS 3302 YAZOO - PIGEON ROOST CREEK				0	0
MS 3302 YAZOO - PINEY CREEK				0	0
MS 3302 YAZOO - POTACOCAMA CREEK				0	0
MS 3302 YAZOO - PUMPKIN CREEK				0	0
MS 3302 YAZOO - RIVERDALE CREEK				0	0
MS 3302 YAZOO - RIVERSIDE BLACK BAYOU	4,500,000			4,500,000	0
MS 3302 YAZOO - SABOUGLA CREEK				0	0
MS 3302 YAZOO - SENATOBIA CREEK				0	0
MS 3302 YAZOO - SEVIER LAKE-FISH BAYOU				0	0
MS 3302 YAZOO - SHAW				0	0
MS 3302 YAZOO - SHORT FORK CREEK				0	0
MS 3302 YAZOO - SKUNA RIVER				0	0
MS 3302 YAZOO - SOUTHWEST DELTA SUNFLOWER				0	0
MS 3302 YAZOO - STRAYHORN CREEK				0	0
MS 3302 YAZOO - SUNFLOWER				0	0
MS 3302 YAZOO - TILLATOHA CREEK				0	0
MS 3302 YAZOO - TOBY TUBBY CREEK	4,400,000			4,400,000	0
MS 3302 YAZOO - TOPASHAW				0	0
MS 3302 YAZOO - TURN BAYOU				0	0
MS 3302 YAZOO - WHITE OAK-ARK BAYOU				0	0
MS 3302 YAZOO - WILL NEILL				0	0
OK 3101 WASHITA- BEAR CREEK	4,811,318	4,582,208	767,036	229,110	3,815,172
OK 3101 WASHITA- BEAVER CREEK	5,347,795	3,875,214	1,896,862	1,472,581	1,978,352
OK 3101 WASHITA- BIG CANYON LATERALS				0	0
OK 3101 WASHITA- BIG SANDY CREEK				0	0
OK 3101 WASHITA- BITTER CREEK	3,392,074	2,899,209	1,554,804	492,865	1,344,405
OK 3101 WASHITA- BUTLER LATERALS	3,268,421	781,919	538,999	2,486,502	242,920
OK 3101 WASHITA- CADDO CREEK	8,888,821	6,837,555	4,757,701	2,051,266	2,079,854
OK 3101 WASHITA- CHEROKEE SANDY	9,601,000	7,218,797	1,392,162	2,382,203	5,826,635
OK 3101 WASHITA- COBB CREEK (FAST RUNNER)	6,821,504	3,248,335	2,083,437	3,573,169	1,164,898
OK 3101 WASHITA- COWDEN LATERALS	8,517,536	2,527,459	2,663,898	5,990,077	-136,439
OK 3101 WASHITA- DELAWARE CREEK				0	0
OK 3101 WASHITA- E. LATERALS TO LAKE TEXOMA				0	0
OK 3101 WASHITA- FINN CREEK	5,914,803	3,720,002	2,508,418	2,194,801	1,211,584
OK 3101 WASHITA- FORT COBB LATERALS	6,811,683		1,625,818	6,811,683	-1,625,818
OK 3101 WASHITA- GLASSES CREEK				0	0
OK 3101 WASHITA- GYP CREEK	3,009,219	578,696	165,846	2,430,523	412,850
OK 3101 WASHITA- IONINE CREEK	6,087,523	4,682,710	124,384	1,404,813	4,558,326
OK 3101 WASHITA- KICKAPOO SANDY	5,903,647	4,373,072	1,689,554	1,530,575	2,683,518
OK 3101 WASHITA- LINE CREEK				0	0
OK 3101 WASHITA- LITTLE WASHITA	12,985,568	10,557,373	6,593,890	2,428,195	3,963,483
OK 3101 WASHITA- MANSVILLE LATERALS				0	0
OK 3101 WASHITA- MAYSVILLE LATERALS	5,000,948	4,000,758	1,917,592	1,000,190	2,083,166
OK 3101 WASHITA- OIL CREEK				0	0
OK 3101 WASHITA- RAINY MOUNTAIN CREEK	19,414,464	14,934,203	3,666,692	4,480,261	11,267,511
OK 3101 WASHITA- ROARING CREEK	4,921,214	4,279,317	2,788,282	641,897	1,491,035
OK 3101 WASHITA- RUSH CREEK	7,534,554	5,581,151	3,954,084	1,953,403	1,627,067
OK 3101 WASHITA- SADDLE MOUNTAIN CREEK	5,765,349	1,736,551	918,422	4,028,798	818,129
OK 3101 WASHITA- SALT CREEK				0	0
OK 3101 WASHITA- SPRING CREEK	6,044,040	850,076	203,211	5,193,964	646,865
OK 3101 WASHITA- SUGAR CREEK	22,261,168	17,528,479	8,955,013	4,732,689	8,573,466
OK 3101 WASHITA- TONKAWA CK-DELAWARE CKS	8,217,198	7,336,784	2,694,994	880,414	4,641,790
OK 3101 WASHITA- W LATERALS TO LAKE TEXOMA				0	0
OK 3101 WASHITA- WHITESHIELD CK	944,706	684,570	541,609	260,136	142,961

OK 3101 WASHITA- WILDHORSE CK (UP & LWR)	33,814,610	22,694,369	11,264,346	11,120,241	11,430,023
OK 3101 WASHITA- WINTER CK	3,560,559	3,236,872	2,176,726	323,687	1,060,146
TX 3601 MDL. COLORADO - BROWNWOOD LATERALS	8,065,188	5,975,463	2,447,380	2,089,725	3,528,083
TX 3601 MDL. COLORADO - SOUTHWEST LATERALS	5,996,100	5,706,000	1,804,320	290,100	3,901,680
TX 3601 MDL. COLORADO - UPPER PECAN BAYOU	12,161,243	9,008,000	2,429,111	3,153,243	6,578,889
TX 3601 MDL. COLORADO - UPPER SAN SABA RIVER	1,703,478	1,353,000	00,000,000	350,478	1,353,000
TX 3501 TRINITY - BEAR CREEK	18,385,590	13,109,000	2,894,850	5,276,590	10,214,150
TX 3501 TRINITY - BIG SANDY CREEK					0
TX 3501 TRINITY - BOX CREEK					0
TX 3501 TRINITY - CATFISH CREEK	39,962,490	21,918,400	5,647,830	18,044,090	16,270,570
TX 3501 TRINITY - CEDAR CREEK	32,005,182	20,670,000	7,592,900	11,335,182	13,077,100
TX 3501 TRINITY - CHAMBERS CREEK	6,697,867	5,077,838	4,345,960	1,620,029	731,878
TX 3501 TRINITY - CLEAR CREEK	4,636,111	3,724,964	2,167,000	911,147	1,557,964
TX 3501 TRINITY - CLEAR FORK TRINITY RV.	20,327,827	15,368,222	9,182,910	4,959,605	6,185,312
TX 3501 TRINITY - DENTON CREEK	752,635	283,516	00,000,000	469,119	283,516
TX 3501 TRINITY - DUCK & MESQUITE					0
TX 3501 TRINITY - EAST DALLAS	12,637,270	8,891,980	2,909,440	3,745,290	5,982,540
TX 3501 TRINITY - EAST FORK ABOVE LAVON					0
TX 3501 TRINITY - E. LATERALS OF EAGLE MTN.	6,707,958	4,252,600	1,943,310	2,455,358	2,309,290
TX 3501 TRINITY - ELM FORK					0
TX 3501 TRINITY - ELM FORK & E. LATERALS					0
TX 3501 TRINITY - FIVE MILE CREEK	523,808	169,043	00,000,000	354,765	169,043
TX 3501 TRINITY - FOSSIL CREEK					0
TX 3501 TRINITY - HACKBERRY CREEK	5,818,936	3,402,000	571,600	2,416,936	2,830,400
TX 3501 TRINITY - HICKORY CREEK	1,229,000	408,400	150,000	820,600	258,400
TX 3501 TRINITY - ISLE DU BOIS CREEK					0
TX 3501 TRINITY - JOHNSON CREEK					0
TX 3501 TRINITY - KEECHIE CREEK	4,385,273	2,638,300	758,120	1,746,973	1,880,180
TX 3501 TRINITY - LITTLE ELM & LATERALS	1,721,025	1,310,000	592,500	411,025	717,500
TX 3501 TRINITY - LOWER E. FORK LATERALS					0
TX 3501 TRINITY - MANSON'S CREEK	98,060	26,335	00,000,000	71,725	26,335
TX 3501 TRINITY - MARINE CREEK					0
TX 3501 TRINITY - MARY'S CREEK	13,938,580	10,620,000	2,443,580	3,318,580	8,176,420
TX 3501 TRINITY - PILOT GROVE	6,843,883	3,910,810	357,000	2,933,073	3,553,810
TX 3501 TRINITY - RED OAK CREEK	26,011,869	17,520,000	6,996,952	8,491,869	10,523,048
TX 3501 TRINITY - RICHLAND CREEK	1,028,382	274,524	70,000	753,858	204,524
TX 3501 TRINITY - RUSH CREEK	6,641,213	6,060,000	1,390,050	581,213	4,669,950
TX 3501 TRINITY - SALT CREEK & LATERALS	82,796	25,127	00,000,000	57,669	25,127
TX 3501 TRINITY - SYCAMORE CREEK	4,607,420	717,150	150,000	3,890,270	567,150
TX 3501 TRINITY - TEHUACANA CREEK					0
TX 3501 TRINITY - TOWN CREEK	1,356,835	532,802	00,000,000	824,033	532,802
TX 3501 TRINITY - VILLAGE CREEK	5,893,540	4,314,600	880,300	1,578,940	3,434,300
TX 3501 TRINITY - VILLAGE & WALKER CREEKS					0
TX 3501 TRINITY - WALNUT CREEK					0
TX 3501 TRINITY - W. LATERALS OF EAGLE MTN.					0
TX 3501 TRINITY - W. LATERALS OF THE TRINITY					0
TX 3501 TRINITY - WHITE ROCK					0
VA 0701 POTOMAC - HAWKSBILL CREEK-APPLICATION	2,357,550	1,684,430		673,120	1,684,430
VA 0701 POTOMAC - LINVILLE CREEK	36,652,761	21,129,356	9,966,590	15,523,405	11,162,766
VA 0701 POTOMAC - LOWER NORTH RIVER			500,000		-500,000
VA 0701 POTOMAC - MIDDLE RIVER	1,173,725	783,800		389,925	783,800
VA 0701 POTOMAC - MOFFETT CREEK					0
VA 0701 POTOMAC - NAKED CREEK					0
VA 0701 POTOMAC - NORTH FORK SHENANDOAH					0
VA 0701 POTOMAC - PASSAGE CREEK	1,825,505		4,500,000	1,825,505	-4,500,000
VA 0701 POTOMAC - SOUTH RIVER	2,191,438		3,221,000	2,191,438	-3,221,000
VA 0701 POTOMAC - UPPER NORTH RIVER					0
VA 0701 POTOMAC - SOUTH FORK SHENANDOAH RIVER					0
WV 0701 POTOMAC - CACAPON RIVER	37,485,800	33,842,100	250,000	3,643,700	33,592,100
WV 0701 POTOMAC - LOST RIVER	9,153,300	8,713,500	3,611,855	439,800	5,101,645
WV 0701 POTOMAC - LUNICE CREEK	14,413,400	12,130,000	1,950,335	2,283,400	10,179,665
WV 0701 POTOMAC - NEW CREEK-WHITES RUN	15,845,500	12,774,500	5,353,730	3,071,000	7,420,770
WV 0701 POTOMAC - NO. & SO. MILL CREEK					0
WV 0701 POTOMAC - NORTH RIVER	36,817,200	30,782,700	16,114,156	6,034,500	14,668,544
WV 0701 POTOMAC - PATTERSON CREEK	36,822,600	25,607,300	210,000	11,215,300	25,397,300
WV 0701 POTOMAC - SO. BRANCH UPSTREAM OF U.TRACT	42,430,800	31,413,800	11,868,556	11,017,000	19,545,244
WV 0701 POTOMAC - SOUTH FORK RIVER					0

INFORMATION RESOURCE MANAGEMENT

The budget justification includes requests for appropriations in excess of \$85 million for InfoShare, as well as other agency-specific information resources management projects.

In his testimony submitted to this subcommittee, the Inspector General of USDA indicated several areas of concern regarding implementation of InfoShare, including project management and accounting for costs and expenditures associated with implementation.

Question: Please indicate what steps have been taken to address each of the issues raised by the Inspector General on Info Share.

Answer: The InfoShare Program Office has taken several positive steps to address recommendations from Office of Inspector General (OIG) reports and audits. For example, comprehensive cost/benefit analyses are taking place today in offices in Alabama as part of our project to support field service centers with local-area and wide-area networks and compatible telephone systems. Results of these analyses will determine our approaches for nation-wide implementation of these systems.

The InfoShare Program Office staff now includes a full-time information security manager who oversees all issues relating to security, data access and privacy, in conjunction with both Departmental, National Institute of Standards and Technology, partner agency and oversight agency security staffs. The Information Security Manager has started to propose solutions to problems which have recently emerged. The InfoShare Information Security Manager includes OIG and OIRM staffs in the document review process before documents are released.

InfoShare has added an Acquisitions Coordinator position to the Program Office in order to work more closely with the Departmental procurement office and to ensure consistency with procurement policies and procedures.

InfoShare continues to identify and address opportunities for improving Program management.

Question: According to the Inspector General, the use of agency funds for Info Share was not accounted for. Please provide a detail of the amounts, and from what agencies, funds were transferred for Info Share and for what the funds were used.

Answer: For FY 1993 and 1994, the period covered by the OIG report, InfoShare expenses were \$12.2 million and \$21.9 million, respectively. All transferred amounts were accounted for in the InfoShare budget tracking and accounting system. These funds were used to pay for the Kentucky Test Laboratory, for permanent InfoShare personnel costs, for outside contractors who provided analysis and project support services, for supplies and equipment, and for support for several low-cost, high pay-back projects which demonstrated benefits to partnership customers. I will provide for the record a table showing the details of the funds contributed by the InfoShare partner agencies.
[The information follows.]

INFOSHARE SOURCE OF FUNDS
(Dollars in Thousands)

Agency 1/	FY 1993 Actual	FY 1994 Actual
CFSA.....	\$8,047	\$10,440
RHCDS.....	3,160	3,957
NRCS.....	828	7,487
CSREES.....	123	--
Total InfoShare.....	12,158	21,884

1/ The pre-reorganization partner agencies were Farmers Home Administration, Soil Conservation Service, Agricultural Stabilization and Conservation Service/Commodity Credit Corporation, Federal Crop Insurance Corporation, and Extension Service.

Question: The Inspector General notes that all Info Share projects have been put on hold pending an analysis of the Common Access Manager. Has this analysis been completed? What were the findings? Has Info Share development resumed? Does the Common

Access Manager achieve the goal of data sharing between agency systems?

Answer: USDA made a decision to refocus the InfoShare Program on business process reengineering as a prerequisite to large-scale acquisitions of new technology. As a result of this new focus, several projects, including the Common Access Manager (CAM), were put on hold in FY 1995.

CAM was designed as a menu system to allow field personnel to access programs and information resident on different computer systems; the Common Client Fast Track project successfully demonstrated data sharing between different partner Agency. No development has taken place this fiscal year.

Question: In addition to Info Share, there are four other agency information resources management initiatives which have a total cost of over \$25 million. Is there an office within the Office of the Secretary which oversees all departmental information resources projects? If no, why not?

Answer: The Office of Information Resources Management (OIRM), a staff office under the Assistant Secretary for Administration, provides for Departmental long range IRM planning and evaluation, guides the IRM planning of all USDA agencies, and monitors and oversees agency and Departmental IRM programs. The individual USDA agencies are responsible for managing their specific information resources projects.

Question: It is my understanding that USDA has or will advertise several position vacancies in the Info Share office. How many positions are being advertised? What pay scale are these positions? From where will these salaries be paid? Against what office's staffing ceiling will these positions be charged?

Answer: The InfoShare Program Office has advertised for three Management and Program Analyst positions at general schedule (GS) grade 14/15. Salaries will be paid from the InfoShare Program Office budget. These positions will be charged to the Departmental Administration ceiling. These positions were budgeted for and are reflected in the InfoShare staff year ceiling.

Question: What mechanisms, technologies and procedures are being implemented to allow programs and agencies to evolve common understandings of USDA's business information and to share this information in a way that it ensures that it is enforced in USDA's application systems?

Answer: The large volumes of data handled by the USDA, as well as the need to share data across systems and programs, underscores the importance of data quality and standardization. We recognize that a common approach by agencies to defining, modeling, designing, and documenting data must be addressed to adequately perform mission objectives. USDA is attacking this issue on several fronts.

At the Departmental level, our Office of Information Resources Management (OIRM) initiated a Data Management Program to address cross-agency data issues. To date, two USDA data management policy documents, the Data Management Policy and Data Element Standards Manual have been developed to provide consistent guidance across USDA. Additionally, a data element standards manual has been developed and implemented to provide a common approach to data administration for the InfoShare, Modernization of Administrative Processes (MAP), and Financial Information Systems Vision and Strategy (FISVIS) programs. Currently, we are exploring the possibility and appropriateness of a Departmental Data Repository that would provide a USDA-wide mechanism to enforce data standards and promote re-use of data objects

At the agency level, InfoShare efforts to build applications common to several functional areas have employed techniques such as Joint Application Design (JAD), data modeling, and rapid prototyping to build consensus for data elements. A data repository that enforces standardization, promotes reuse of data elements and models, and discourages duplication is being established as a pilot effort for the Departmental Data Repository.

We recognize that to effectively establish the role of data management and ensure quality information, the bigger picture of business mission and information management must also be addressed. To that end, the USDA has launched several initiatives, the USDA IRM Modernization Program and the USDA Application Information System Life-Cycle Management project that, collectively, will ensure the development of information systems that are driven by business needs and evaluated by mission performance and provide managers information that is timely, valid, and shareable.

Question: What mechanisms, technologies and procedures are being implemented to support reengineering USDA applications in order to eliminate the widespread redundancies and inconsistencies of data and business processes within the Department?

Answer: At the Department level, reengineering of applications is supported by: 1) the InfoShare Program, a multi-agency partnership to provide improved services to USDA agricultural, natural resource, and rural development program customers, 2) the Financial Information Systems Vision and Strategy (FISVIS) Program under the direction of USDA's Chief Financial Officer, that is modernizing USDA's financial systems and 3) the Modernization of Administrative Processes (MAP) Program under the Assistant Secretary for Administration, that is modernizing USDA administrative processes. In addition, the Office of Information Resources Management is instituting a new process to ensure that information systems are driven by business needs, and that policies, procedures, and the technical architecture within the Department support business modernization.

I will provide some specific examples for the record.
[The information follows:]

- a) InfoShare's Common Client Database project that lays the foundation for one-time-only entry of customer information at the field office, which will be shared by many agencies;
- b) The FISVIS project recently awarded a contract for a commercial off-the-shelf software package to supply a new financial information system for USDA at the National Finance Center in New Orleans that will provide a modern, core financial system to improve reporting and reduce redundancy and inconsistency in financial information systems.
- c) The MAP program has underway a project to reengineer small purchase systems that support the use of credit cards across USDA. Use of credit cards for small purchases saves time, costs less than traditional procurement methods, and will provide greater cost 'savings' to USDA agencies through a streamlined small purchase system.

Question: What mechanisms, technologies and procedures are being implemented to eliminate USDA's information resources' dependence on the multitude of hardware and software platforms utilized within the Department?

Answer: We are developing at the Department level, an approach to modernize our information resources management (IRM) program at USDA. This approach, the IRM Modernization Program, will ensure that information systems are driven by business needs, and that policies, procedures, and the technical architecture support

reenengineering efforts. We are also working to provide an architecture for integrated application systems that will build on data management efforts to date, and reduce USDA's dependency on specific software platforms.

While no single hardware or software platform will meet all of USDA's business needs, we intend to increase the use of existing contracts to accomplish business-driven acquisitions of interoperable hardware and software to those needs. USDA agencies are expected to use existing contract vehicles whenever possible to meet their business needs. Use of existing contracts will not only increase the interoperability of systems, but also reduce the time and cost involved in the procurement process.

Within USDA, two agencies, the Forest Service and the Animal and Plant Health Inspection Service (APHIS), have contracts that are now, or will soon be open to other USDA agencies for their purchase of hardware and software. InfoShare is currently doing business analyses that will determine its partner agencies' requirements for computer and telecommunications hardware and software. Additional multi-agency contracts could result from these analyses.

Question: What cost reductions do you expect from implementing these mechanisms, technologies, and procedures? Are these savings reflected in the budget?

Answer: USDA has identified total cost savings of \$4.1 billion in its reorganization and streamlining plans. While much of this is related to staff reductions, some of the savings will result from improvements in the use of information technology to support USDA business. Specific examples include:

- a) Field office consolidations. Improved use of information systems will support the consolidated USDA field office structure. Conducting business through a streamlined field structure results in significant savings to USDA.
- b) Telephone system savings. Today, a single customer call cannot always be routed to the appropriate service provider because call forwarding is not possible. Existing agency telephone systems are incompatible. We have already proven that the installation of consolidated, compatible telephone systems at our field service centers improves service delivery and provides one-stop shopping. Volume discounts also help reduce monthly telephone bills at those sites using consolidated systems. Our up-front investments are quickly recovered.
- c) Small purchases. Reengineering of processes and systems that support small purchases by USDA will provide significant savings compared with existing procurement mechanisms.

NUTRITION RESOURCES

Question: Given the limitations on federal resources, why is the Administration requesting further increases in funding for fiscal year 1996 for USDA's nutrition research, education and promotion activities?

Answer: While we are keenly aware of the limitations on federal resources, we are also mindful of our responsibility to ensure the health and safety of our nation's children and the large, long term benefits better diets will provide. Choices were carefully weighed in developing the Department's nutrition research and education budget request. Most programs were held constant at the current level. However, the budget does include increased funds in four priority areas.

First, we are requesting an increase of \$14 million to provide nutrition education to an estimated additional 400 thousand WIC participants in 1996. I'm told that this is a formula estimate derived from our proposal to increase funding for WIC by \$350 million. As you know, expanding WIC to reach all eligibles is and remains an Administration priority and a bipartisan policy objective. Our request continues to move us towards achieving that objective.

Second, we are requesting an increase of \$5 million for Team Nutrition activities in support of School Meals Initiative for Healthy Children. Team Nutrition is a complementary set of technical assistance, nutrition education, and social marketing strategies designed to improve the health and education of children by creating innovative public and private partnerships that promote healthy food choices through the media, schools, families, and the community. USDA's School Meals Initiative underscores our national health responsibility to provide meals at school for children that are consistent with the Dietary Guidelines for Americans and current scientific nutritional recommendations.

Third, Team Nutrition activities must ultimately extend beyond the food programs, and that is one of the reasons that we are requesting an additional \$2 million to support activities of the Center for Nutrition Policy and Promotion. As the lead Federal Agency for nutrition, the Center will help carry USDA's nutrition promotion to all Americans so that they can understand the close links between diet and health.

Finally, we are requesting an additional \$7 million to improve data on the food consumption habits of infants and children. The National Academy of Sciences recommended that improved data be developed so that EPA may determine children's exposure to pesticides. Without this information, caution about exposure levels could lead to very low use of pesticides, increasing costs to consumers and agricultural producers.

Question: Please identify by account all funds requested for nutrition education, research and related activities for fiscal year 1996 as compared to the fiscal year 1995 funding level. Please describe the role and responsibilities of each USDA agency and program as it relates to nutrition.

Answer: The Department's human nutrition education, research and related activities fall primarily within the scope of three agencies: the Agricultural Research Service, which has responsibility for conducting research into the nutrient values of food, their bioavailability, and nutrient needs of humans, and monitoring the food consumption patterns of individuals; the Cooperative State Research, Education, and Extension Service, which is responsible for providing nutrition education to food stamp recipients and other low income households, and making grants to researchers at Land Grant Universities and Experiment Stations; and the Food and Consumer Service, which is responsible for ensuring the nutritional security of low income Americans and providing program participants with nutrition education. Additional activities are carried out by the Economic Research Service, which monitors our food supply; and the Food Safety and Inspection Service, which, in addition to ensuring the safety of our food supply, helps consumers understand how to read and apply information on the new food labels.

Coordination of these activities within USDA and between USDA, other agencies, and the private sector is facilitated by the newly established Center for Nutrition Policy and Promotion. I will attach a copy of the Department's regulation pertaining to coordination of USDA activities in the area of human nutrition research and education, as well as a table providing budget information for fiscal years 1994 through 1996. Additional

descriptions of each program are included in the Department's Explanatory Notes accompanying the 1996 Budget under their respective agency.

[The information follows:]

U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

DEPARTMENTAL REGULATION		NUMBER: 1044-7
SUBJECT: Coordination of USDA Activities Relating to Human Nutrition Research and Education	DATE:	May 23, 1994
	OPI:	Office of the General Counsel

1 Purpose

The United States Department of Agriculture (USDA) is committed to the mission of improving the nutrition of American consumers. USDA plays a leading role within the Executive Branch in the development and implementation of programs aimed at strengthening nutrition research and education efforts within the United States, and at improving the nutritional quality of foods produced and consumed and the nutritional status of the American people. USDA activities are focused on determining the nutritive value of foods, human nutritional needs, types and amounts of food consumed by Americans, and strategies for improving the food supply, individual diets, and the health and well being of Americans. Other major roles are to help individuals understand the relationship between food and health through sound research-based nutrition education programs and information, and to administer the domestic food assistance programs. Research-based information is also critical for food producers and processors, who recognize that consumers' demands drive the marketplace.

Coordination mechanisms already exist between USDA and the Department of Health and Human Services and other Federal agencies with responsibilities in these areas. These are the Interagency Board on Nutrition Monitoring and Related Research, and the Interagency Committee on Human Nutrition Research.

The purpose of this regulation is to establish a coordinating structure within USDA which will assure that all activities addressing research and education relating to human nutrition, including scientific and economic research as well as public education and information programs, will be carried out within the Department in a fully integrated and coordinated manner.

2 Establishment of Council

In order to strengthen policy and programmatic coordination within USDA in the nutrition education and research areas, there is hereby established within the Department a Nutrition Education and Research Coordinating Council (Council). The Assistant Secretary for Food and Consumer Services and the Assistant Secretary for Science and Education shall serve as Co-Chairs of the Council. The Council shall include as members the Administrators of the Agricultural Marketing Service, the Agricultural Research Service, the Cooperative State Research Service, the Economic Research Service, the Extension Service, the Food and Nutrition Service and the Food Safety and Inspection Service, and the Director of the National Agricultural Library. The Assistant Secretary for Economics, the Assistant Secretary for Marketing and Inspection Services, and the Director, Office of Budget and Program Analysis, shall also serve as members of the Council. In the event of successor positions or organizations, the equivalent officials shall serve as members of the Council.

The Council shall meet at the call of the Co-Chairs, and meetings shall be held at least quarterly. The Council will review agency planning documents and budget requests for functions related to human nutrition research and education. The Council will also review and advise the Secretary and other USDA officials with respect to nutrition research and education programs and priorities, and will evaluate the performance of agency functions related to nutrition research and education. The Council shall report to the Deputy Secretary.

3 Activities Covered

The Council established under paragraph 2 shall coordinate all USDA activities addressing research, analysis, education and public information programs related to human nutrition. This coordinating mechanism will apply to all such activities and functions of the Department, including any such functions subsequently assigned to the Department, and will include specifically the following:

- A USDA Scientific Research. Included are all research activities conducted by the Agricultural Research Service including the nutrition research activities conducted at the Beltsville Human Nutrition Research Center, Beltsville, Maryland; Children's

Nutritional Research Center, Baylor College of Medicine, Houston, Texas; Western Human Nutrition Research Center, the Presidio, San Francisco, California; Grand Forks Human Nutrition Research Center, Grand Forks, North Dakota; and Human Nutrition Research Center on Aging, Tufts University Medical Center, Boston, Massachusetts.

- B Research Grant Programs. Included are all research grant programs related to human nutrition research conducted by the Cooperative State Research Service, including the human nutrition component of the National Research Initiative and the fellowships program in Higher Education.
- C Information Collection and Economic Analysis. This includes all functions performed by the Agricultural Research Service, the Economic Research Service and the Food and Nutrition Service relating to collection and analysis of information regarding market and nutrition monitoring, food supplies and prices, food demand and consumer behavior, socio-economic barriers to improving nutrition, nutrition education evaluation, and evaluation of food assistance programs.
- D Education and Information Functions. Included are the Department's education and information functions related to human nutrition, including activities presently performed by the Agricultural Marketing Service, the Food and Nutrition Service, the Food Safety and Inspection Service, the Expanded Food and Nutrition Education Program and other related activities carried out by the Extension Service, and the nutrition-related programs of the National Agricultural Library including its Food and Nutrition Information and Education Resources Center.

4 Report to the Secretary

The Council shall submit to the Secretary annually, as of September 30 of each year, a report summarizing the accomplishments of the preceding year, problems encountered, and plans for the coming year for the Department's research and education functions related to human nutrition. Such report shall provide the Council's advice with respect to funding levels, accomplishments, and additional steps required, if any, to effect the full integration and coordination of the Department's functions in these areas.

5 Staff Support

Such staff support as may be required, including necessary support in preparation of the Council's annual report, shall be provided jointly by the Administrators of the Agricultural Research Service and the Food and Nutrition Service, and by the heads of such other participating USDA agencies as may be appropriate.

6 Implementation

The provisions of this regulation shall be effective immediately.

HUMAN NUTRITION RESEARCH, EDUCATION AND RELATED ACTIVITIES

(Dollars in Millions)

Human Nutrition Research

	Fiscal Year		
	1994 Actual	1995 Estimate	1996 Budget
Agricultural Research Service	\$60.0	\$60.5	\$68.6
CSPEES - Research and Education	13.3	12.7	12.2
Economic Research Service	1.5	1.5	1.5
TOTAL	74.8	74.7	82.3

Human Nutrition Education, Evaluation and Demonstrations

Agricultural Research Service	2.5	2.6	3.6
CSREES - Extension Activities	82.7	82.7	82.7
Food and Consumer Service	209.7	242.6	262.9
Food Safety and Inspection Service	0.1	0.1	0.1
TOTAL	295.0	328.0	349.3
TOTAL, Research, Education & Information	369.8	402.7	431.6

UNITED STATES DEPARTMENT OF AGRICULTURE NUTRITION RESEARCH AND MONITORING PROGRAM

Budget Authority
(Dollars in Millions)

	Fiscal Year			
	1994 Actual	1995 Estimate	Change	1996 Budget
NUTRITION REQUIREMENTS/HEALTH MAINTENANCE				
Agricultural Research Service	\$37.6	\$38.3	\$1.1	\$39.4
CSREES-Research and Education	7.7	7.6	-1.6	6.0
TOTAL	45.3	45.9	-0.5	45.4

NUTRITIONAL STATUS/FOOD INTAKE

Agricultural Research Service	16.0	14.0	7.0	21.0
CSREES-Research and Education	3.5	3.2	0.0	3.2
TOTAL	19.5	17.2	7.0	24.2

USE OF FOOD/FOOD CHOICES

CSREES-Research and Education	0.8	0.6	0.0	0.6
Economic Research Service	1.1	1.1	0.0	1.1
TOTAL	1.9	1.7	0.0	1.7

NUTRITION COMPOSITION/BIOAVAILABILITY

Agricultural Research Service	6.4	8.2	0.0	8.2
CSREES-Research and Education	1.2	1.2	1.1	2.3
TOTAL	7.6	9.4	0.0	10.5

NUTRITIONAL IMPACTS OF PROGRAMS

CSREES-Research and Education	0.1	0.1	0.0	0.1
Economic Research Service	0.4	0.4	0.0	0.4
TOTAL	0.5	0.5	0.0	0.5

TOTALS

Agricultural Research Service	60.0	60.5	8.1	68.6
CSREES-Research and Education	13.3	12.7	-0.5	12.2
Economic Research Service	1.5	1.5	0.0	1.5
TOTAL	74.8	74.7	8.1	82.3
=====				

UNITED STATES DEPARTMENT OF AGRICULTURE

NUTRITION EDUCATION, EVALUATION AND DEMONSTRATIONS

Budget Authority
(Dollars in Millions)

Fiscal Year

	1994 Actual	1995 Estimate	Change	1996 Budget
CSREES-Extension Activities:				
Extension (Formula est.)	\$17.0	\$17.0	0.0	\$17.0
Expanded Food and Nutrition Education Program (EFNEP)	61.4	61.4	0.0	61.4
Intensive Education for WIC Participants	4.3	4.3	0.0	4.3
TOTAL	82.7	82.7	0.0	82.7
AGRICULTURAL RESEARCH SERVICE:				
Guidance and Education Research Branch	1.8	1.8	1.0	2.8
Library & Electronic Access to Information ...	0.7	0.8	0.0	0.8
TOTAL	2.5	2.6	1.0	3.6
FOOD AND CONSUMER SERVICE:				
Center for Nutrition Policy & Promotion	0.0	2.2	0.0	2.2
Nutrition Promotion Initiative	0.0	0.0	2.0	2.0
WIC Nutrition Studies and Evaluations	5.0	3.5	0.0	3.5
WIC (State nutrition education estimate)	138.2	151.7	13.6	165.3
WIC Breastfeeding Promotion	24.0	24.0	0.0	24.0

CN Nutrition Studies	3.8	3.7	0.5	4.2
Disabled Child Grants	0.0	0.5	-0.5	0.0
School Meals Initiative Support	3.3	20.6	5.0	25.6
Kentucky/Iowa Demonstration	3.7	3.7	0.0	3.7
Nutrition Education & Training Prg. (NET)	10.3	10.3	-0.3	10.0
Food Service Management Institute	1.9	2.0	0.0	2.0
Food Stamp SAE Nutrition Education	7.3	7.3	0.0	7.3
Grants for New Ways to reach Food Stamp Recipients	0.5	0.0	0.0	0.0
FSP Research Demos and Evaluation	11.1	11.7	0.0	11.7
FSP State Exchange Project	0.4	0.4	0.0	0.4
FDP/R Nutrition Aides Demos (Indian Prg.)	0.2	1.0	0.0	1.0
TOTAL	209.7	242.6	20.3	262.9
FOOD SAFETY AND INSPECTION SERVICE				
Nutrition Labeling	0.1	0.1	0.0	0.1
TOTAL, USDA Nutrition Education and Information	295.0	328.0	21.3	349.3
=====				

Question: Mr. Secretary, you indicate in your prepared testimony that the Administration's proposed FY 1996 budget for the Department of Agriculture saves hundreds of millions of dollars through reorganization.

What is the total net savings from reorganization reflected in the Administration's fiscal year 1996 appropriations request?

Would you please provide for the record a detailed breakdown of the reorganization savings, by account, reflected in the Department's fiscal year 1996 Request?

Answer: The Administration's proposed FY 1996 budget for the Department of Agriculture emphasizes fiscal responsibility; saving hundreds of millions of dollars through reorganization while at the same time making important investments in our country's future. In any reorganization, there are some up-front costs, such as office consolidation and modernization. Even after these costs are recognized, our FY 1996 budget reflects over \$100 million in savings from FY 1995 and much greater savings since FY 1993, the base year prior to reorganization. For the record, I am providing a table which provides a detailed breakdown of the reorganization savings as reflected in our FY 1996 request.

[The information follows:]

UNITED STATES DEPARTMENT OF AGRICULTURE 1996 Reorganization Savings/Costs From 1995 Level (Dollars in Thousands)					
Agency/Account	Increases		Decreases		Net Savings/ Costs
	Office Consolidation or Modernization	SY Reduction	Adm Eff.	Lab/Office Closures	
Office of the Secretary.....			-30		-30
Chief Financial Officer.....			-14		-14
Departmental Administration.....		-250	-76		-326
Agriculture Buildings and Facilities.....		-100	-873		-973
Office of Communications.....		-50	-62		-112
Office of the Inspector General.....		-300	-356		-656
Office of the General Counsel.....		-255	-65		-320
Executive Operations:					
Chief Economist			-15		-15
NAD			-63		-63
OBPA			-20		-20
OSDBU			-1		-1
Total, EO			-99		-99
Agricultural Research Service.....		-10,387	-7,316	-9,583	-27,286

Cooperative State Research, Education, and Extension Service:				
Cooperative State Research Activities.....		-48		-48
Extension Activities.....	-115	-145		-260

Total, CSREES.....	-115	-193		-308
Economic Research Service.....				
National Agricultural Statistics Service.....		-284		-284
Animal and Plant Health Inspection Service:				
Salaries and Expenses.....	-5,364	-4,495		-9,859
Buildings and Facilities.....		-141		-141

Total, APHIS.....	-5,364	-4,636		-10,000
Grain Inspection, Packers & Stockyards Adm.	-502	-144		-646
AMS - Marketing Services.....	-679	-664		-1,343
Food Safety and Inspection Service.....	-6,036	-1,729	-1,000	-8,765
Consolidated Farm Service Agency:				
Salaries and Expenses.....	8,876	-5,640		3,236
Natural Resources Conservation Service:				
Conservation Operations.....	15,761	-3,998		11,763
River Basin Surveys and Investigations.....		-75		-75
Watershed Planning.....		-50		-50
Watershed and Flood Prevention Operations.....		-184		-184
Resource Conservation and Development.....		-175		-175

Total, NRCS.....	15,761	0	-4,482	11,279
Rural Utilities Service:				
Salaries and Expenses	2,611	-274	-690	1,647
Rural Housing and Community Development Service:				
Salaries and Expenses	17,753	-8,171	-2,722	6,860
Rural Business and Cooperative Development Service:				
Salaries and Expenses	2,004	-1,351		653
Food and Consumer Service:				
Food Program Administration.....		-247	-1,549	-1,796
Foreign Agricultural Service			-2,151	-2,151

Total, Direct Appropriations				
Agriculture Bill.....	47,005	-32,730	-35,126	-10,583
				-31,434
Forest Service		-66,265	-16,336	-82,601

Total, Direct Appropriations, USDA.....	47,005	-98,995	-51,462	-10,583
=====				
				-114,035

P.L. 480

Question: The budget proposes substantial fiscal year 1996 reductions in the P.L. 480 programs and even rescissions of previously appropriated fiscal year 1995 funds. Does this reflect a policy decision to discontinue international programs that have proved to be very successful in the past?

Answer: No, the budget does not propose to discontinue or eliminate the P.L. 480 foreign food aid programs. We recognize the importance of these programs for our efforts to assist developing countries meet their import needs, to enhance their food security, and to expand U.S. Agricultural exports.

At the same time, however, the proposed reductions do reflect the tight constraints on discretionary spending within the international affairs account of the Federal budget. P.L. 480 programs are unique because they are the only USDA programs which are included in the international account. Not only are the spending targets constrained, but in addition there are some fairly high priority activities within that account which the Administration believes merit increased funding. Given these factors, it was necessary to propose a lower level of funding for P.L. 480 food assistance in 1996. However, most of the reduction is proposed for Title I concessional sales and Title III grants, which allows funding for Title II humanitarian and emergency donations to remain at a relatively high level. This ensures we will be able to meet the most critical food aid needs overseas.

Office of the Chief Financial Officer

Question: The fiscal year 1996 budget requests an additional \$819,000 and 8 staff years for the Office of the Chief Financial Officer. I note that staff years allocated to this office have grown from 55 in fiscal year 1994 to an estimated 70 for fiscal year 1995 and will increase further to 78 staff year positions under the fiscal year 1996 proposed budget. This is in addition to USDA's Office of Budget and Program Analysis which is proposed to be maintained at its current level of 74 staff years in fiscal year 1996 and the separate budget offices maintained by most of USDA's agencies.

While I understand that the Chief Financial Officers Act required the Department to establish a Chief Financial Officer and imposed new requirements on the Department, it did not necessarily necessitate the creation of a separate office to perform these functions. Why are additional funds and staff being required for USDA's Office of Chief Financial Officer?

Answer: The Office of the Chief Financial Officer brings together under a new name the former Office of Finance and Management, previously funded through the Departmental Administration appropriation, and the Chief Financial Officer positions, previously funded as one of the several Office of the Secretary level accounts. There was no increase in the number of FTE staff years available to these constituent organizations between fiscal years 1994 and 1995. The apparent increase is caused by the comparison of actual staff years used in fiscal year 1994 to staff year ceiling for fiscal year 1995. During fiscal year 1994 several vacancies occurred due to buyouts, early retirements, and normal attrition. Some vacancies were not filled in order to make lump sum payments to employees who left the rolls. The fiscal year 1995 estimates assume that all positions will be filled.

The Office of Finance and Management has not received a program from the Congress increase since fiscal year 1987. During that same period, it has assumed substantial responsibilities, such as implementation of the Federal Financial Managers Financial Integrity Act. Consequently the resources were not appropriated for the broad responsibilities contained in the Chief Financial Officer's Act. The resources requested for fiscal year 1996 represent a modest investment to safeguard the assets of the Department. Of the \$819,000 requested, \$84,000 is needed to continue staff and programs from fiscal year 1995, and the remaining \$735,000 supports the staff and programs for the reinvention of the USDA financial systems and for the preparation of auditable financial statements. I will provide more details for the record.

[The information follows:]

OCFO is requesting \$550,000 and 8 staff years for the reinvention of USDA financial systems. The financial systems at USDA need remedial action to address General Accounting Office and Office of the Inspector General audit findings and concerns that keep this area in the Office of Management and Budget's "high-risk" category. Some of the deficiencies cited include a lack of consistent and accurate application of accepted accounting principles, lack of supporting documentation to substantiate reports, inability to accurately report on USDA's investment in loans receivable, lack of integration between the Departmental financial system and the various agency subsystems, and a lack of modern database technology. In an effort to remedy this situation, the Department has initiated the Financial Information Systems Vision and Strategy (FISVIS) project to address and resolve many of these issues.

Cost information is necessary for cost awareness and cost control, for performance measurement, determining reimbursement and setting fees, for making program decisions or good economic choice

decisions. Currently, USDA program managers have little information on the cost of providing services; thus, their ability to "manage by results" through performance measurement is seriously inhibited. There is also a need for better information to support the many programs where fees are charged to recover full costs of products or services provided to the public, and for determining reimbursements for services and products provided to other agencies. USDA collects over \$2.5 billion in various fee and charge programs (i.e., inspection services, marketing services, timber sales, etc.).

These resources support the standardization of financial information; development of FISVIS; correction of system deficiencies which result in high risk areas; assure improved control over fraud, waste and abuse; streamline processes to eliminate paperwork and develop cost accounting information for cost awareness and cost control. These resources are critical to providing reliable, complete, accurate financial information to policy, program, management and operating personnel when and where they need it.

OCFO is also requesting \$185,000 to improve the preparation of USDA financial statements. USDA annually prepares a Departmentwide and seven agencywide financial statements. These must be submitted to OMB by March 1 following the end of each fiscal year. In fiscal year 1993 the Department and Forest Service received qualified opinions and the Department's statement was five months late. In fiscal year 1991 and fiscal year 1992 both the Department and Forest Service received adverse opinions and the Department's statements were very late (12 months after end of year being audited). These, and other audits have identified numerous, significant weaknesses in financial systems and internal controls.

Audited financial statements provide significant benefits. Statements will be prepared with unqualified opinions, on time so they are useful for decision making and resource allocation by USDA policy and program personnel. Underlying financial systems will also be upgraded. Timely, audited financial statements will provide better information for Congress. The unqualified opinions will provide credible information. At the same time our reinvented financial systems will eliminate material weaknesses and improve underlying systems thus enhancing the credibility and usefulness of the information our systems provide. The preparation of auditable financial statements will provide agencies with accurate, reliable financial data for policy planning and program evaluation.

OFFICE OF THE CHIEF FINANCIAL OFFICER

Question: Please provide for the record a breakdown of all USDA resources, by account, both in terms of staff years and level of funding, devoted to budget preparation, analysis and financial management, for each of fiscal years 1994, 1995, and 1996.

Answer: Yes, I will provide that information for the record.
[The information follows:]

Agency	Fiscal Year 1994				Fiscal Year 1995				Fiscal Year 1996			
	Budget Activities		Fin. Management		Budget Activities		Fin. Management		Budget Activities		Fin. Management	
	\$Y	\$	\$Y	\$	\$Y	\$	\$Y	\$	\$Y	\$	\$Y	\$
ADMINISTRATION												
Executive Operations ...a/.....	72.9	5,925	0.1	8	74.9	5,841	0.2	13	74.7	5,946	1.1	58
Chief Financial Officer ...b/.....	5.0	363	43.0	3,395	6.0	417	49.0	3,580	6.0	442	52.0	3,745
Departmental Administration	5.4	332	8.7	418	5.6	357	7.8	418	6.7	415	6.6	316
Office of Communications	0.2	12	0.8	46	0.2	13	0.8	48	0.2	13	0.8	49
Office of the Inspector General	7.9	332	4.2	823	7.9	173	4.5	400	7.9	184	4.4	414
Office of the General Counsel	1.5	82	0.5	51	1.5	85	0.5	53	1.5	86	0.5	54
Total	1,925.9	124,273	2,889.2	181,649	1,884	121,977	2,775	186,259	1,842	119,561	2,641	186,940

NOTE: These are estimates of the resources available for budget and financial management activities. A number of agencies are undergoing a review of program resources and the reorganization of program activities is not complete.

a/ Includes the Office of Budget and Program Analysis.

b/ Excludes the National Finance Center.

"GREENBOX" PROGRAMS

Question: The fiscal year 1996 budget proposes additional spending consistent with the Administration's commitment to increase program levels of "greenbox" and other GATT consistent export promotion programs by \$600 million during the next five years. How did you identify which "greenbox" programs should receive funding increases to take full advantage of the marketing-opening benefits of the GATT agreement?

Answer: In the process of developing our "greenbox" recommendations the Administration focused on those GATT allowable programs and activities that are likely to take maximum advantage of the emerging trade opportunities that will be available as the Uruguay Round Agreement is implemented. A key objective was to present a balanced program portfolio that will strengthen our ability to compete globally, increase farm income, and contribute to the economic development of rural communities. Thus, our proposals recommend expansion in a variety of Department activities, including market expansion and outreach, alternative uses of agricultural products, export credit guarantees, and international commodity assistance.

Question: You indicate in your prepared testimony, Mr. Secretary, that the Department will need to review its array of export promotion and market development programs to ensure they remain effective for meeting our export expansion goals in a more liberalized trading environment. What type of review is planned to determine the effectiveness of these programs?

Answer: The 1995 Farm Bill will offer an excellent opportunity to begin this process and, in fact, the Department began an internal review of programs and activities last summer in order to contribute to the Administration's recommendations for the Farm Bill. One of the primary considerations in the review of international programs was how they might be changed to reflect the post-Uruguay Round trading environment.

In addition, we anticipate undertaking an interagency review of the export subsidy programs shortly. This has been prompted in part by provisions of the Uruguay Round implementing legislation which authorize use of the Export Enhancement Program for export promotion purposes and not just to discourage unfair trade practices. We anticipate this review will look at programming criteria as well as operational aspects of the program.

We are also reviewing our export credit guarantee programs as part of our participation in the development of guidelines for agricultural export credit programs being undertaken by the Organization for Economic Cooperation and Development. This review was agreed to in the course of negotiating the agricultural provisions of the Uruguay Round Agreement.

These are a few examples of our initial review of export programs. These efforts will need to continue as the trade liberalizing provisions of the Uruguay Round Agreement become effective. We expect far-reaching changes in the global marketplace, and we need to be prepared to take advantage of these.

Question: In his testimony before this Subcommittee, Secretary Moos indicates that without further support for market promotion and expansion activities, the U.S. risks losing existing market share as eleven of our major agricultural competitors will spend a total of nearly \$500 million annually to carry out a wide variety of programs. Can you update us on what evidence we have seen so far that our major agricultural competitors are increasing their efforts

to take advantage of a more liberalized trading environment under the NAFTA and GATT agreements. What types of activities are our competitors undertaking?

Answer: Because these agreements are only now being implemented, we do not have a complete picture of how and to what degree other countries will be increasing their export promotion and market development efforts. We do, however, have anecdotal information which provides evidence of how these efforts are expanding.

For example, in its 1996 budget Canada announced a new program for up to \$1.0 billion Canadian in additional credit guarantees for agricultural products, including \$700 million to support export sales of wheat and barley through the Canadian Wheat Board. This is in addition to the roughly \$500-\$600 million Canadian in guaranteed credit traditionally offered through the Board, and \$200 million Canadian for other agricultural products.

A study by the Foreign Agricultural Service last year showed that 11 other major exporters spent close to \$500 million on market promotion activities. More recent information indicates that public and private spending for these activities was down slightly in France and Germany, but is expected to increase as the Uruguay Round Agreement is implemented.

We have learned that Chile plans to increase government funding for export promotion to approximately \$21 million in 1995; this is up from \$3 million in 1993. Another example of expanded promotion efforts involves the Australian Wheat Board, which recently opened a regional office in Hong Kong to develop business in China, North and South Korea, Hong Kong, and Taiwan. The Board was also instrumental in bringing together an Australian consortium to bid for construction of a \$1.0 billion grain storage and handling facility in China and has announced a flour mill construction project in Vietnam.

ARS LABORATORY CLOSURES

The fiscal year 1996 budget proposes to close 12 ARS research laboratories. The budget indicates that savings from these laboratory closings will enable ARS to add additional funding to high priority agricultural research projects. Last year, ARS testified before this Committee that the costs of closing research locations were nearly equal to the first-year savings from these closures.

Question: I note that the fiscal year 1996 budget again assumes the savings from proposed laboratory closures but does not include the costs to close these facilities. What is the real impact on the fiscal year 1996 budget if we close these laboratories?

Answer: We estimate that the cost of closing 12 ARS research laboratories in FY 1996 will be \$8.3 million. These costs will be absorbed in the budget. In the second year and beyond, there is a savings of the full \$9.6 million that will be invested to accelerate high priority agricultural research projects.

LEGISLATIVE PROPOSALS

Question: Please list the programs which are proposed to be funded through savings generated through legislative changes and the amount of the savings in both budget authority and outlays. Please provide a breakdown of which proposals are requested to be enacted through appropriations bill language and which are requested to be enacted through authorizing legislation.

Answer: The 1996 Budget included several saving proposals that would be enacted through authorizing legislation. The 1996 Budget also included a legislative proposal in the Rural Economic and Community Development area for a Performance Partnership Program (PPP) that would consolidate the funding for 13 programs. This would provide greater flexibility to tailor financial assistance to

applicant needs. Since the PPP can be carried out under existing laws, the President submitted to Congress on May 2, 1995, budget amendments that requested this change under current law.

The list of programs that require legislative changes is provided below:

	Budget Authority	Outlays
	(Dollars in Thousands)	
Food Safety and Inspection Service:		
New user fees to recover 100 percent of the cost of providing inspection service beyond a primary approved shift for meat, poultry and egg processing establishment	-\$106,767	-\$106,767
Animal and Plant Health Inspection Service:		
New user fees for animal welfare, biotechnology/environmental protection, and veterinary biologics	-8,203	-8,203
Grain Inspection, Packers and Stockyards Administration:		
New user fees to recover the cost of standardization activities and license fees to administer the Packers and Stockyard Act	-16,474	-16,474
Agricultural Marketing Service:		
New user fees to recover the cost of standardization	-3,887	-3,887
New user fees to recover the cost of administering marketing agreements and orders	<u>(-10,451)</u>	<u>-9,932</u>
Total, Proposed Legislation	<u>-\$135,331</u>	<u>-\$145,263</u>

EXPIRING AUTHORIZATIONS

Question: Please list all appropriations requested in the President's fiscal year 1996 budget for which authorizations are expiring at the end of fiscal year 1995, lack existing authorization, or exceed the authorized fiscal year 1996 funding level.

Answer: Yes, I will be happy to provide that for the record.
[The information follows:]

United States Department of Agriculture

Expiring Legislation

Food, Agriculture, Conservation, and Trade Act of 1990 funding authorization covering Agricultural Research Service programs.

Food, Agriculture, Conservation, and Trade Act of 1990 funding authorization covering Cooperative State Research, Education, and Extension Service programs except for:

 Sustainable Agricultural Research and Education
 Native American Institutions Endowment Fund
 Renewable Resources Extension Act

Food and Consumer Service

 Food Stamp Program
 Nutrition Assistance to Puerto Rico
 The Emergency Food Assistance Program
 Soup Kitchens
 Elderly Feeding Program
 Commodity Supplemental Food Program

Food Distribution Program on Indian Reservations

Rural Utilities Service

Distance Learning and Medical Link Grants

2337 Rural Telecommunication Partnership Program

Rural Business and Community Development Service

Local Technical Assistance and Planning Grants

Consolidated Farm Service Agency

Dairy Indemnity Program (12/31/95)

Forestry Incentives Program

Conservation Reserve Program (12/31/95)

Natural Resources Conservation Service

Resource Conservation and Development Program

Great Plains Conservation Program

Expired Legislation

Rural Housing and Community Development Service

Section 515 Rural Rental Housing Loans

QUESTIONS SUBMITTED BY SENATOR SPECTER
COMMODITY PROGRAM REDUCTIONS

Question: In your testimony, you mentioned that specific measures you plan to take to achieve the proposed \$1.5 billion reduction in the agriculture programs will be proposed at a later date. Can you please give the Subcommittee an idea of what date we can expect you to announce these specific measures and could you inform the Subcommittee today of what general program areas you propose to restructure?

Answer: We plan to release more specific Administration guidance for the 1995 farm bill on May 10, 1995. In today's dynamic economy, I believe the first test of government should be the extent to which it enables the private sector to adapt and change. Successful government policies should enable farmers to meet the challenges of new competition and new opportunities. Basic commodity programs should let farmers have the flexibility and freedom to respond to the signals of the market. These are the general principles I will bring to the farm bill debate.

Question: Senator Lugar, Chairman of the authorizing committee, has stated his intention of reducing agriculture program spending by \$15 billion through the Farm Bill reauthorization. Noting the difference in spending reduction between his proposal and your agency's, can you inform the Subcommittee if you expect to move toward Senator Lugar's position as we begin the Farm Bill debate?

Answer: Agriculture has already absorbed significant spending reductions over the last decade and is competing in a market where one of our primary competitors, namely the European Community, is spending about 10 times the annual amount that we are spending on agricultural programs. We will work with Senator Lugar and other Congressional leaders to develop a farm policy that maintains a level of investment we believe critical to sustaining our food and fiber system and prepares rural America to meet the challenges of the next century.

Question: If not, can you give us an idea of how you expect Senator Lugar's proposal to affect agriculture supply and prices?

Answer: Lower government payments and elimination of the Export Enhancement Program (EEP) would reduce the overall profitability of the U.S. agriculture sector. This increases financial pressures on less efficient, highly leveraged producers. For most commodities, we would not expect Senator Lugar's proposal to have a significant impact on commodity production or prices. Although Government payments would be lower, production decisions in agriculture are largely independent of payments under current farm programs due to fixed farm program payment yields.

Wheat and barley, however, would be affected under this proposal more than other commodities, mostly reflecting lower EEP exports. With the loss of EEP exports, wheat and barley prices would be down the most. In response, acreage and production of these crops would be lower. Acreage adjustments would occur in the Northern Plains, Southern Plains, and the Mountain States for wheat, and in the Northern Plains and the Mountain States for barley.

Plantings and production of rice would also be lower, reflecting lower net returns for program participants as payments are reduced. Producers planting the minimum acreage allowed under the 50/85 program, particularly in the Gulf Coast, would reduce plantings because benefits of 50/85 deficiency payments decline.

FOREST SERVICE REORGANIZATION

The USDA Forest Service reorganization program proposes to move the headquarters of the Northeastern Forest Experimentation Station and the Northeast Area State and Private Forestry, which provide the entire northeastern U.S. with forest research information, as well as housing the global climate research for the northeastern and north-central U.S., to Milwaukee, Wisconsin.

Question: Noting the distance of the proposed new headquarters, what is the rationale for such a move?

Answer: One of the goals is to achieve efficiencies in staffing and overhead costs at the regional headquarters level. Consolidating some of the headquarters operations is an effective way to realize this goal.

Question: Does the USDA expect the Forest Service to increase or even maintain its ability to provide adequate forest information to the entire Northeast region?

Answer: The goals of the proposal to consolidate the Northeastern Forest Experiment Station, the North Central Forest Experiment Station, the State and Private Forestry Northeastern Area office, and the Eastern Regional office in one city are to reduce costs by phasing out redundant staffing, further improve the management of natural resources, and enhance public service. The proposal seeks to better integrate the Forest Service leadership for the entire northeastern quarter of the country. By reducing costs at the regional headquarters level, the Agency would be better able to continue to maintain critical customer services at the field level.

Question: What are the costs associated with moving the headquarters, including personnel, to Wisconsin?

Response: As I promised during my confirmation proceedings, I am reviewing all Forest Service plans for reorganization. We must reduce the size of the Agency, and therefore we must find more efficient ways to work with a reduced staffing level. Any costs of moving management personnel because of a headquarters consolidation

would be recaptured through reductions in overall personnel costs as redundant positions are eliminated.

Question: Does your Department's plan to reduce agriculture spending by \$1.5 billion include reforming the sugar support program?

Answer: The Department supports a continuation of the basic elements of the current sugar program. However, the Department does recognize the need for simplifying the existing legislation, and thereby simplifying program administration. Further, the current sugar program does not result in net outlays. Hence, any change in the program would not contribute to the \$1.5 billion savings target.

QUESTIONS SUBMITTED BY SENATOR GORTON

TRADE WITH MEXICO

Question: Shipments to Mexico have dropped dramatically for the apple growers in my state. While December's peso devaluation is part of the problem, difficult fruit inspection procedures and associated costs mandated by the Mexican government have been a substantial deterrent. I am informed that our industry budgeted \$1.8 million simply to meet the requirements of a Mexican inspection office located in the Northwest.

We need to iron out such non-tariff problems impacting trade with Mexico as well as other nations. I understand trade is a two-way street and, for example, in the case of Mexico, its avocados should be given fair access to the U.S. market if pest and disease control based on science are found to be adequate by your department. How do you propose to ensure that agriculture trade between Mexico and the United States is encouraged rather than discouraged, especially in terms of technical barriers?

Answer: The United States and Mexico maintain numerous fora in which we discuss trade matters of mutual interest. Some of these are technical working groups which predate NAFTA, while others, such as the Committee on Sanitary and Phytosanitary Measures and the Committee on Standard Related Measures are mandated by NAFTA. Many issues are resolved at the working group level without fanfare or public or political attention. A few, however, may need to be elevated to a formal dispute settlement process, if an amiable solution cannot be reached in bilateral discussions. Both the Uruguay Round and NAFTA Agreements provide formal mechanisms to resolve disputes regarding sanitary and phytosanitary, and other standard-related measures. USDA takes seriously the U.S. obligations under the WTO and NAFTA; we expect our trade partners to do the same. We will vigorously pursue our rights under these trade agreements and will insist that markets for U.S. agricultural products are not unduly restricted by unjustified measures.

Question: With the passage of GATT and NAFTA and increasingly competitive international markets for agricultural products, what is the role of publicly funded agriculture research in keeping U.S. farmers competitive?

Answer: In recent years, many of the decision-making bodies and advisory groups that establish priorities for agricultural research topics and designate funds have recognized the importance of improving U.S. agricultural competitiveness. For example, the Joint Council on Food and Agricultural Sciences, a public and private sector group chartered by Congress, lists the improvement of U.S. food and natural resource competitiveness as one of five recommended priorities for the U.S. food and agricultural science and education system for 1995. I agree that agricultural research has an

important role in maintaining our competitiveness in an increasingly competitive global market.

Question: Publicly funded agriculture research has made a tremendous contribution to a low cost, high quality and safe food supply. What is the priority for publicly funded agriculture research at universities and government agencies in relationship to anticipated changes in the Farm Bill and budget pressures?

Answer: The U.S. research and education community has contributed significantly to the development of a low cost, high quality and safe food supply. A high quality and safe food supply is a priority for agriculture research and continued research is necessary to address such items as detection, assessment, and control of foodborne illness, nutritional quality of foods to design healthy diets, and identification of the role of natural and manmade chemicals in foodborne diseases. Publicly funded research will also be important in ensuring the competitive position of so many U.S. products in world markets. While changes in the budget will likely require policy officials to carefully identify high priority research that is the most critical to important continuing issues related to food safety and quality, the administration will not waiver on its basic views on the fundamental importance of adequate levels of public support for research.

Question: Publicly funded agriculture research has an extremely high return on investment and represents a small portion of the total budget of the nation. Is the United States under-investing in agriculture research and should this investment be increased?

Answer: In a recent study, the average annual return for basic and applied agriculture research was estimated at 40 percent. These studies indicate that the U.S. may be under investing in agricultural research, especially when compared to other countries. It is important to increase public research funding to the extent possible given current fiscal constraints to maintain a responsive research capability to address issues important to states and the Nation. In our Federal-state research partnership, we have found that Federal research dollars are leveraged almost four times through non-Federal investments. An aggressive research program is essential to ensure that agriculture remains competitive in an international market.

Question: Publicly funded agriculture research in university and government laboratories has made important contributions to the development of new knowledge and it has addressed issues of broad public interest such as soil erosion, water quality, and plant and animal disease control where the private sector can't effectively capture the returns. What will be the role of publicly funded agriculture research at university and government laboratories as partners with the private sector in conducting research for the nation's agriculture and forest industries?

Answer: Publicly funded agricultural research will continue to focus on issues in the broad public interest, such as environmental impacts of agricultural practices; on issues where the benefits are widely dispersed, such as water management, soil quality and trade issues; and on fundamental science which benefits development of new technologies and applications across the spectrum of agricultural and natural resources. This will complement and support industry efforts to develop economically important new technologies and products, and establish research capacity in the industrialized sectors of agriculture.

Question: Public policy is clearly moving toward less direct financial assistance for production agriculture and more income for markets. Production agriculture must be responsive to changing market needs and continue to improve production efficiency to meet

competition. Research is a key component of that effort. What priority do you give funding for production and marketing research?

Answer: Production and marketing research is important in maintaining a strong economy for agriculture. With the increase in competitive marketing under GATT and NAFTA marketing is clearly important for farms income. However, production efficiency that minimizes negative environmental effects is critical to being competitive. Value added research is a further component that may add to future returns to U.S. agriculture through international markets. Combining marketing, production efficiency that meets environmental goals, and value added strategies will assist U.S. farmers and processors to compete effectively in a new international environment.

Question: The Conservation Reserve Program has been very popular with the environmental community, the recreational enthusiasts, and the farmers. Please discuss the budget implications for renewing the existing contracts as opposed to letting them expire. If the existing contracts are permitted to expire and the program is continued will there be a change in the type of crop land participating and in the geographic regions involved?

Answer: We agree that all CRP participants should be given an opportunity to extend maturing contracts. Participants wanting to extend their contracts would be offered rental rates that reflect the prevailing local market rates for comparable land adjusted for environmental and conservation benefits based on the established criteria. There would also be new enrollment on a nationally competitive basis up to a level consistent with the CRP budget baseline. The extended contracts plus new enrollments would result in the CRP containing the most environmentally sensitive lands with regard to erosion, wildlife, water quality, and other high-priority values. USDA has been working with a number of groups in developing a revised selection process. Once a draft proposal is completed, USDA will solicit public comments through rule making which should be completed this summer. Until a revised selection process is determined, the budget and geographic implications cannot be clearly defined.

Question: CRP funding currently competes with commodity programs. Should it be competing with commodity programs or should it be funded in another location?

Answer: The Conservation Reserve Program (CRP) and the commodity programs both help to support and stabilize commodity prices and incomes and improve the natural environment. CRP provides price and income support by reducing the amount of acreage planted to program crops, lowering available supplies, and increasing farm prices and income. Of course, CRP also provides substantial environmental protection benefits. The commodity price and income support programs provide significant environmental benefits through the protective cover on acreage retired from cropping under the acreage reduction program (ARP) requirements and the 0,50/85,92 provisions.

In terms of program outlays, expenditures for enrolling acreage in CRP also substitute for commodity program payments in achieving commodity price and income support objectives. Thus, increased CRP enrollment and payments can be expected to reduce the Commodity Credit Corporation expenditures necessary to achieve desired levels of commodity program acreage reduction.

The tradeoffs between the two types of programs to best achieve the social goals of commodity support and environmental protection have always been hard, but they are especially difficult given the current budget pressures.

WHEAT TARGET PRICES

Question: Under the wheat program, the producer receives a deficiency payment representing the difference between the target price and the higher of either the loan level or the national average price multiplied times a historic yield. What is the significance of the \$4.00 target price for wheat and how did the figure evolve?

Answer: The current wheat target price of \$4.00 per bushel reflects a political balance between income support to producers and government outlays. Minimum target prices are established by statute (most recently, the Food, Agriculture, Conservation, and Trade Act of 1990) but actual target prices are established by USDA by regulation (generally at the statutory minimum levels).

Historically, wheat target prices have varied from \$2.05 for the 1974 and 1975 crop wheat programs to \$4.38 for the 1984 to 1987 crop wheat programs. Wheat target prices per bushel since deficiency payments were authorized for the 1974 wheat program are: 1974-75: \$2.05; 1976: \$2.29; 1977: \$2.90; 1978-79: \$3.40; 1980: \$3.63; 1981: \$3.81; 1982: \$4.05; 1983: \$4.30; 1984-87: \$4.38; 1988: \$4.23; 1989: \$4.10; 1990-95: \$4.00.

In some early years, target prices were indexed to a cost of production index which caused automatic increases. Later increases were designed to increase the income support available to wheat producers. The decline from the \$4.38 to \$4.00 level that took place between 1987 and 1990 was largely budget driven. A general rule of thumb is that, other things equal, a one-cent decline in the wheat target price reduces total wheat deficiency payments by \$18 to \$20 million.

Question: Has the national average price exceeded the \$4.00 target price in recent times and if it did, what happened to the deficiency payment that the farmer receives?

Answer: The relevant national-average wheat price has not exceeded the wheat target price in recent years. Since wheat deficiency payments were first authorized for the 1974 crop wheat program, the national-average wheat price has exceeded the wheat target price in only 5 crop years: 1974, 1975, 1976, 1979, and 1980. For these 5 years, no wheat deficiency payments were made.

Question: Would a 3 percent annual reduction in target price equal a 3 percent reduction in the payment going to the wheat farmer?

Answer: Other things equal, a 3 percent reduction in the wheat target price would lead to a much larger reduction in the deficiency payment going to a wheat farmer. A producer's deficiency payment is the product of the national-average payment rate, the farm's payment yield, and the farm's payment acres. Assume that a producer's payment yield and payment acres will not change with the reduction in the target price. Then we can use the change in the deficiency payment rate to examine the change in deficiency payments.

First, consider the current wheat target price of \$4.00 per bushel. Assume that the relevant market price is \$3.00 per bushel and that the market price is higher than the basic loan rate. Thus, the deficiency payment rate is \$1.00 per bushel (calculated as the \$4.00 target price less the \$3.00 market price).

Now assume that the target price is reduced by 3 percent to \$3.88 per bushel and that the market price is the same at \$3.00. The new deficiency payment rate is now \$0.88 (calculated as the \$3.88 target price less the \$3.00 market price). The reduction in the deficiency payment rate is 12 percent.

After 5 years of annual reductions in the target price of 3 percent, the wheat target price would be \$3.44. If the market price were to remain at \$3.00 per bushel, the payment rate would fall to \$0.44, a reduction of 56 percent.

For a given reduction in the target price, the higher the market price, the larger the percentage reduction in the deficiency payment rate. Of course, high market prices which result in low deficiency payment rates also mean high market returns to producers. With high market prices, the large percentage reduction in the deficiency payment rate resulting from a target price reduction would not result in a large reduction in gross receipts for most producers. Generally, the percentage decline in gross receipts would be less than the percentage decline in target price.

WHEAT FARM INCOME

Question: In most cases, would you think that an individual wheat farmer's net income is greater than, equal to, or less than the annual deficiency payment he receives?

Answer: Annual deficiency payments are a component of a wheat producer's gross income. Net income is the difference between gross income and production costs.

From a "wheat-sector" perspective (which can be viewed as an "average" of the individual farmer perspective), market returns are by far the largest source of gross returns, followed by deficiency payments and Conservation Reserve Program (CRP) payments. Current estimates for 1994 crop wheat show that the value of production for the U.S. wheat sector equals \$8.0 billion, deficiency payments equal \$1.1 billion and CRP payments equal \$0.5 billion. For 1994, then, market returns are roughly 83 percent of gross returns while deficiency payments are roughly 11 percent and CRP payments are roughly 6 percent.

Sector net returns depend on which alternative cost of production estimate is used. When the cost of production is measured as net returns above variable cash costs (which gives the highest net income calculation), sector net returns for 1994 wheat are estimated at \$5.8 billion. Even with this highest net income measure, deficiency payments as a percentage of net income equal 19 percent--an indicator that deficiency payments are an important component of producers' income.

EXPORT ENHANCEMENT PROGRAM

Question: The Export Enhancement Program was established to help our farmers compete with the farmers of the European Community. Could you explain how this program works and if it is still needed.

Answer: The Export Enhancement Program or EEP is designed to ensure that the prices at which U.S. agricultural commodities are sold in overseas markets are competitive with those offered by competitor countries who subsidize, especially the European Union. Under the program, the Commodity Credit Corporation pays cash subsidies -- or bonuses -- to exporters to enable them to sell U.S. agricultural commodities in targeted markets at prices which match those from the EU and other subsidizing suppliers. The size of the bonus is based on the difference between the higher U.S. price and the lower world price. The EEP is the key tool the United States has to meet the differential pricing practices of competitor countries. By ensuring that U.S. commodities are price competitive, U.S. export levels are higher than they would otherwise be, which helps to increase domestic U.S. prices and farm income.

Question: What impact has this program had on the quantity of wheat coming into the United States from Canada?

Answer: In past years, sales of U.S. wheat under EEP have been at high levels, but shipments of wheat from Canada to the United States were not that large. It has only been in the last few years when the Canadian Wheat Board has modified its policy on sales to the United States that those sales have surged. Another factor which may have contributed to this growth was a change in the Board's sales policy to their domestic mills which potentially resulted in a substantial reduction in revenue for the Board. The likely result of this was a Canadian Wheat Board decision to focus more attention on the U.S. market for wheat. To the extent that EEP has boosted domestic U.S. prices, it may also have created a more favorable market for Canadian wheat. In the case of durum wheat coming in from Canada, the quality of imported wheat is frequently significantly higher than the quality of U.S. exports under EEP. Consequently, these imports of durum are not a replacement for sales of U.S. durum under EEP, but rather are competing for domestic market share with our own high quality durum.

Question: Has the government used this program to reduce the deficiency payments going to wheat farmers?

Answer: One of EEP's primary benefits has been the increase in exports of U.S. wheat over levels they would have been in the absence of the program. This increase or export additionality has strengthened domestic U.S. wheat prices, which in turn has helped to lower deficiency payments to wheat producers. USDA analysis of the program has shown repeatedly that the savings in wheat deficiency payments has exceeded the costs of the EEP bonuses to exporters, provided export additionality is being realized by the program.

Question: Is this program utilized when the wheat price is at the level of the target price?

Answer: Since the EEP was implemented in the spring of 1985, the United States has not had a crop year in which farm wheat prices have averaged at the target price, although there have been periods during some marketing years when farm wheat prices have been close to the target price. However, the use of EEP would primarily depend upon whether U.S. wheat would be competitive in world markets without the program. Also, the effects on farm income of not utilizing or terminating the program would have to be considered.

Question: If the target price were lowered in order to reduce expenditures, would the EEP be used when the price reaches the new lower target price?

Answer: The program would continue to be used if it were important to remain competitive in world wheat markets. The size of the bonus paid to exporters might be reduced as the domestic wheat price moved lower, but this would depend on world price levels and the subsidizing practices of other exporting countries.

WHEAT MARKETING LOAN PROGRAM

Question: Could you explain how the marketing loan program for wheat works and how it evolved in the 1990 Farm Program?

Answer: Potential benefits of marketing loan provisions include marketing loan gains, interest forgiveness, and loan deficiency payments. Under marketing loan provisions, a producer who takes out a wheat loan from USDA may repay that loan at the "posted county price" (PCP) whenever the PCP is less than the outstanding loan principal plus interest. (USDA each day calculates a PCP for each class of wheat grown in each county nationwide. The goal in setting PCP formulas is for the PCP to match the local market price as closely as possible.)

A repayment at less than full principal plus interest always involves forgiveness of some or all of the interest owed. If the

PCP is sufficiently low, the producer will earn a marketing loan gain--the difference between the PCP and the loan principal. A producer who is eligible to take out a wheat loan, but agrees not to, may earn a "loan deficiency payment" (LDP) if the PCP is less than the county loan rate.

Marketing loan provisions offer a loan settlement alternative to forfeiting wheat to the Commodity Credit Corporation when market prices are low relative to loan rates. When producers repay loans using marketing loan repayment provisions, the wheat stays in the market rather than entering government inventories. Thus, market prices reflect supply and demand considerations rather than being artificially supported at the loan rate (as when forfeitures occur).

Marketing loan provisions for wheat were discretionary under the Food Security Act of 1985, but were not implemented. These discretionary provisions were continued with modifications in the Food, Agriculture, Conservation, and Trade Act of 1990. Implementation of marketing loan provisions for the 1993 through 1995 programs was mandated by the Omnibus Budget Reconciliation Act of 1990 when the U.S. failed to enter into a GATT agreement by June 30, 1992.

Question: If the marketing loan level were set at a higher level, would it be an alternative for the current deficiency payment and the Export Enhancement Program?

Answer: If properly implemented, a higher loan rate with marketing loan provisions would not significantly interfere with markets--either domestic or export--as would a higher loan rate without marketing loan provisions. It could however result in increased CCC outlays. With marketing loan provisions, market prices would be expected to reflect supply and demand conditions.

Without the Export Enhancement Program (EEP), U.S. exports would be expected to be lower as the European Union continues its use of export subsidies so U.S. wheat prices would be expected to be lower, too. This would increase outlays for either deficiency payments or the loan program.

Income support could be supplied entirely through the loan program if deficiency payments were eliminated. However, there are some inherent problems in doing so. First, delivery of income support through the loan program has a higher budget exposure than delivery through deficiency payments. With the fixed program payment yields and maximum payment acres of deficiency payments, higher-than-expected production that leads to lower prices only increases the deficiency payment rate. With delivery of income support through loan programs, higher-than-expected production would increase both the quantity of wheat on which benefits are earned as well the "rate" at which per-bushel payments are made. Second, higher loan rates would re-link government payments to production. It is very difficult to align loan rates across crops so that high loan rates do not distort production decisions. Third, wheat and feed grain loan programs are implemented at the county level. If producers are to receive equitable income support through loan programs, it would be more important than ever that county loan rates and "posted county prices" be aligned correctly relative to market relationships. Because market relationships change over time while loan rates are set at the start of a year based on previous market relationships, equitable implementation would be very difficult. Currently, adjustments in county loan rates are limited by a statutory 3-percent rule. This rule limits the annual change in any county's loan rate by the percentage change in the national loan rate plus or minus 3 percent.

Question: What is the Department's position on extending the marketing loan for wheat in the next farm bill?

Answer: When prices are low relative to loan rates, a loan program with marketing loan provisions provides a safety valve to keep wheat available to the market while still providing an income safety net at the loan rate to producers participating in the wheat program. From a pure policy perspective, having such a safety valve (and a safety net) can be viewed as positive. Because market prices have been sufficiently above loan rates since marketing loan provisions were implemented for wheat in 1993, marketing loan provisions for wheat have had negligible outlays and little market impact. USDA's position on extending marketing loan provisions for wheat in the next farm bill will need to be developed in the context of other program modifications that may be proposed such as the production eligible for marketing loan benefits and loan levels.

CBO AND USDA WHEAT PRICE PROJECTIONS

Question: The CBO is projecting that the national average price of wheat will fall to \$3.20 over the next five years, and is using this pessimistic price projection to calculate the federal budget exposure due to wheat deficiency payments over the period. Does the USDA estimates agree with the CBO? If not, what are the differing assumptions underlying the price projections?

Answer: The purpose of a budget baseline is to provide a benchmark from which to measure outlay changes caused by proposed changes in program provisions. Baseline assumptions can greatly impact point estimates of specific agricultural variables such as price because of the strong linkages between agricultural programs and markets. In developing baselines, both USDA and CBO must make a number of assumptions about markets, program implementation, and producer responses. Thus, a budget baseline should be viewed as representing one plausible market and program scenario under a certain set of assumptions. Different assumptions will give different results.

The USDA baseline shows the national-average, market-year price for wheat in the year 2000 at \$3.40--\$0.19 higher than the \$3.21 in the CBO February baseline. The major difference between the CBO and USDA baselines is largely due to the difference in the number of acres that are assumed to be enrolled in the Conservation Reserve Program (CRP). Because USDA has more acres enrolled in the CRP, fewer crop acres are available for wheat production and fewer wheat base acres are available for participation in the annual wheat program. The net impact of the lower wheat production in USDA's baseline is higher prices. Other differences in assumptions probably do not contribute significantly to price differences.

FAR WEST SPEARMINT MARKETING ORDER

Question: Legislation may be introduced this year to terminate the Far West Spearmint Marketing Order. What are your thoughts on this and does the USDA support the current Far West Marketing Order?

Answer: USDA supports the use of procedures set forth in the Agricultural Marketing Agreement Act of 1937 (AMAA) to ensure that farmers support the termination of the order or the elimination of Montana from the order. The Far West spearmint oil marketing order was promulgated under formal rulemaking procedures initiated at the request of the industry and implemented after a majority of spearmint oil growers in the Far West voted in favor of the order in referendum. USDA supports the current order because it has determined that the order is supported by a majority of producers in the Far West spearmint industry and that the order effectuates the declared policy of the Act.

Question: Would the USDA support reforms to the current Marketing Order?

Answer: USDA supports constructive reforms to the marketing order if such changes would meet the objectives of the Far West

spearmint oil industry, including growers in Montana. USDA has taken the initiative on this issue by working with the Spearmint Oil Administrative Committee, a group comprised of industry representatives that locally administers the order.

Question: In the Administration's FY 96 budget request, it proposes to eliminate funding for the CSREES Building and Facilities Account. I am curious as to why the Administration would put forward, yet again, a proposal to zero out this account. In many -- if not most-- instances funding agreements have been reached between the universities and the USDA to complete construction of the facilities. Don't you think that a more responsible approach would be to say, prioritize the existing facilities currently under construction, finish these facilities, and adopt a "no new start" policy? Does the Administration honestly think that this Subcommittee will just pull the rug out from under these projects currently in the process of being completed to leave the Universities hanging in the lurch? What are your thoughts on this? I would also like to know where we are at in finishing existing projects and how much funding is needed to complete each of them?

Answer: As you may know, we have suggested that the Congress authorize a new Agricultural Research Facilities Study Commission and create a competitive grant program to support facility construction at 1862 and 1890 land grant universities. We do not believe Congress should provide financing for all of these ongoing projects before there has been a comprehensive review of the need for such facilities. We would also recommend that any funding be provided through a competitive process.

Information on the status of existing projects and the amount of funding needed to complete each project is as follows:
{The information follows:}

Cooperative State Research, Education, and Extension Service
U.S. Department of Agriculture

STATUS OF FUNDING
CSRS BUILDINGS AND FACILITIES PROGRAM—Fiscal Year 1995

11/25/94 (Rev.)

Name and Location of Facility	Federal Funds Requested (\$000) ¹	Federal Funding FY 1995 (\$000)	Total Fed. Funding To Date (\$000)	Additional Fed. Funds Requested (\$000)
Poultry Science Facility AUBURN UNIVERSITY (Auburn, AL)	6,000	522	522	5,478
Carnall Hall Restoration UNIVERSITY OF ARKANSAS (Fayetteville)	3,000	946	946	2,054
Agriculture Building UNIVERSITY OF ARKANSAS (Little Rock)	4,000	2,332	4,000	0
Alternative Pest Control Containment/Quarantine Facility UNIVERSITY OF CALIFORNIA (Davis/Riverside)	17,500	1,893	4,364	13,136
Animal Reproduction and Biotechnology Laboratory COLORADO STATE UNIVERSITY (Fort Collins)	2,923	1,231	1,551	1,372

Name and Location of Facility	Federal Funds Requested (\$000) ¹	Federal Funding FY 1995 (\$000)	Total Fed. Funding To Date (\$000)	Additional Fed. Funds Requested (\$000)
Chemistry Building CONNECTICUT AGRICULTURAL EXPT. STA. (New Haven)	1,000	0	0	1,000
Agricultural Biotechnology Laboratory UNIVERSITY OF CONNECTICUT (Storrs)	10,000	568	568	9,432
Poultry Biocontainment Laboratory UNIVERSITY OF DELAWARE (Newark)	3,500	1,420	1,749	1,751
Aquatic Research Facility UNIVERSITY OF FLORIDA (Gainesville)	2,050	0	0	2,050
Biocontainment Research Center UNIVERSITY OF GEORGIA (Athens)	8,000	2,396	8,000	0
Center for Applied Aquaculture OCEANIC INSTITUTE (Waimanalo, HI)	9,956	1,495	9,956	0
Agricultural Biotechnology Facilities UNIVERSITY OF IDAHO (Moscow)	5,900	1,761	4,117	1,783
Biological and Environmental Science Facility DePAUL UNIVERSITY (Chicago, IL)	5,000	435	435	4,565
Biotechnology Center NORTHWESTERN UNIVERSITY (Evanston, IL)	12,000	3,218	5,170	6,830

Name and Location of Facility	Federal Funds Requested (\$000) ¹	Federal Funding FY 1995 (\$000)	Total Fed. Funding To Date (\$000)	Additional Funds Requested (\$000)
Swine Development and Training Center UNIVERSITY OF KENTUCKY (<i>Princeton</i>)	897	897	897	0
Animal Research Facilities LSU (<i>Franklinton, LA</i>) and MSU (<i>Poplarville, MS</i>)	1,280	0	0	1,280
Institute for Natural Resources and Environmental Science UNIVERSITY OF MARYLAND (<i>Statewide</i>)	10,000	1,893	5,424	4,576
Center for Hunger, Poverty, and Nutrition Policy TUFTS UNIVERSITY (<i>Boston, MA</i>)	12,272	2,461	5,709	6,563
Center for Water and Wetlands Resources THE UNIVERSITY OF MISSISSIPPI (<i>Oxford</i>)	3,255	1,420	1,700	1,555
National Food Service Management Institute THE UNIVERSITY OF MISSISSIPPI (<i>Oxford</i>)	3,000	0	0	3,000
Center for Plant Biodiversity MISSOURI BOTANICAL GARDEN (<i>St. Louis</i>)	7,913	757	757	7,156
Bioscience Research Laboratory MONTANA STATE UNIVERSITY (<i>Bozeman</i>)	8,000	2,608	8,000	0
Center for Molecular Biology RUTGERS UNIVERSITY (<i>New Brunswick, NJ</i>)	37,200	3,785	14,574	22,626

Name and Location of Facility	Federal Funds Requested (\$000) ¹	Federal Funding FY 1995 (\$000)	Total Fed. Funding To Date (\$000)	Additional Funds Requested (\$000)
Center for Arid Land Studies NEW MEXICO STATE UNIVERSITY (Las Cruces)	11,000	1,420	2,218	8,782
Library/Herbarium NEW YORK BOTANICAL GARDEN (Bronx)	13,000	3,785	11,335	1,665
Ctr. for Rsch. on Human Nutr. & Chronic Disease Prevention WAKE FOREST UNIVERSITY (Winston-Salem, NC)	48,970	2,672	14,108	34,862
Inst. for Agriculture and Rural Human Resource Development MINOT STATE UNIVERSITY (Minot, ND)	4,779	2,600	4,779	0
Animal Care Facility NORTH DAKOTA STATE UNIVERSITY (Fargo)	5,000	0	1,918	3,082
Lake Erie Soil and Water Research and Education Center UNIVERSITY OF TOLEDO (Toledo, OH)	2,800	229	492	2,308
Beef Cattle Research Facility OKLAHOMA STATE UNIVERSITY (Stillwater)	727	375	727	0
Grain Storage Research and Extension Center OKLAHOMA STATE UNIVERSITY (Stillwater)	495	0	0	495
Forest Ecosystem Research Laboratory OREGON STATE UNIVERSITY (Corvallis)	10,000	0	0	10,000

Name and Location of Facility	Federal Funds Requested (\$000) ¹	Federal Funding FY 1995 (\$000)	Total Fed. Funding To Date (\$000)	Additional Fed. Funds Requested (\$000)
Regional Food Innovation Center OREGON STATE UNIV. (Portland, OR, & Moscow, ID)	4,900	2,397	4,900	0
Center for Food Marketing ST. JOSEPH'S UNIVERSITY (Philadelphia, PA)	12,400	2,366	9,962	2,438
Coastal Institute on Narragansett Bay UNIVERSITY OF RHODE ISLAND (Kingston)	19,194	2,702	8,646	10,548
Animal Resource Wing SOUTH DAKOTA STATE UNIVERSITY (Brookings)	5,400	0	0	5,400
Horse Science and Teaching Center MIDDLE TENNESSEE STATE UNIVERSITY (Murfreesboro)	668	0	0	668
Nursery Crops Research Station TENNESSEE STATE UNIVERSITY (McMinnville)	1,700	88	1,700	0
Agricultural, Biological, & Environmental Research Complex UNIVERSITY OF TENNESSEE (Knoxville)	19,250	2,366	5,756	13,494
Animal Biocontainment Facility TEXAS A&M UNIVERSITY (College Station)	17,500	0	0	17,500
Center for Southern Crop Improvement TEXAS A&M UNIVERSITY (College Station)	7,000	508	1,092	5,908

Name and Location of Facility	Federal Funds Requested (\$000) ¹	Federal Funding FY 1995 (\$000)	Total Fed. Funding To Date (\$000)	Additional Fed. Funds Requested (\$000)
Biotechnology Laboratory UTAH STATE UNIVERSITY (Logan)	2,864	387	2,864	0
Rural Community Interactive Learning Center UNIVERSITY OF VERMONT (Burlington)	7,000	0	0	7,000
Animal Disease Biotechnology Facility WASHINGTON STATE UNIVERSITY (Pullman)	23,400	4,172	14,559	8,841
Wheat Research Facility WASHINGTON STATE UNIVERSITY (Pullman)	3,000	426	426	2,574
Natural Resources Building (Addition and Remodeling) UNIVERSITY OF WISCONSIN (Stevens Point)	4,825	2,761	4,825	0
Environmental Simulation Facility UNIVERSITY OF WYOMING (Laramie)	9,216	1,182	3,114	6,102
TOTALS	<u>409,734</u>	<u>62,474</u>	<u>171,860</u>	<u>237,874</u>

FOOTNOTES:

¹ For new facilities, figures in this column represent initial estimates provided by institutions. Costs will be clarified when on-site visit is conducted during FY 1995.

Question: In the Administration's FY 96 budget request, it proposes to eliminate \$46.4 million for Special Research Grants by "prioritizing" grants - high priority to low priority. Last year's funding was \$60 million for this account, and the Administration's proposed reduction would result in a funding level of \$15 million for the account. How do you propose that the subcommittee prioritize these grants - what is low priority and what is high priority for the Administration? Will the Administration submit a proposal to the subcommittee to prioritize this account?

Answer: The fiscal year 1996 budget proposes that \$40 million be provided for special research grants which address problems of national and broad regional interest beyond the scope and resources of the formula based programs. This includes \$25 million for Integrated Pest Management, Pesticide Clearance, and Pesticide Impact Assessment Special Research Grants. These programs are reflected under a separate line entitled Improved Pest Control. However, these grants will be awarded under the Special Research Grants authority. The change underscores the importance of each of these programs to the Department's overall goal of improving the ability of U.S. producers to control pests effectively.

Proposed for elimination are those grants which have concentrated on specific, often local, problems. In view of significant needs for research in high priority national interest topics such as improved pest management systems, funds are not proposed to continue these grants. Due to the discretionary nature of the Hatch Act and related formula based programs, amounts allotted to State institutions permit the institutions to fund research in those areas that they identify as high priority. This flexibility could provide for maintaining some of the programs if the State institutions wish to continue the research. In keeping with the Administration's policy of awarding research grants competitively, these projects could also be submitted for competition and possible funding under the National Research Initiative, and the Administration has recommended an increase in funding for this program.

Selected high priority National interest special research grant programs are proposed for expansion or continuation in the fiscal year 1996 budget. We believe this is a clear expression of priorities for this account.

SCHOOL LUNCH PROGRAM

As you know, the school lunch program has been the subject of intense debate over how much federal involvement is required to provide children with quality free and reduced price lunches. With the debate over block grants and state flexibility, I am interested in looking at ways in freeing up money to support more food and more quality lunches for more children, instead of spending more money to fill out paperwork, hang red tape and employ more bureaucrats.

Question: In your opinion, if the School Lunch Program was designed to be administered at the local level, having local school officials who actually serve the lunches to the children also administer the program, would the quality of services provided to the children receiving free and reduced price lunch increase? I realize that varying costs exist in this program and would appreciate specific breakdowns when appropriate.

Answer: We share your interest in improving the quality of service provided to all children participating in the school lunch program, especially low income children with limited nutritional options. As you know, this Department is engaged in a major initiative to update the nutrition standards for the school meal programs and to provide local food services with tools to enable

them to plan and produce healthier lunches and breakfasts. We are in the process of finalizing a regulation that would require compliance with the Dietary Guidelines and would provide local food services with a variety of options for planning and preparing meals. We expect this rulemaking to provide local meal planners with increased flexibility to satisfy regional or ethnic tastes.

As far as administering school lunch at the local level, while flexibility is important, it is just as critical to maintain the national standards that protect children -- all children -- no matter where they live. It is also important to note that the school meal programs are, in fact, administered locally with direct oversight by the States, and this Department has traditionally recognized this fact and has provided flexibility to cover differing conditions among States and local communities. We at the Federal level are primarily responsible for ensuring that eligibility standards for free and reduced price meals are implemented uniformly nationwide, that proper accountability exists for Federal reimbursement claimed, and that meals served throughout the program comply with recognized nutrition standards.

More than 25 million school children participate in the National School Lunch Program every day; approximately half of them are low income and the other half are middle and above middle income. Federal standards have a fifty year history of successful health outcomes for these children. Without national standards, the nutritional quality and healthfulness of school meals could vary widely from one place to another, with the result that many of our children both needy and non-needy would receive less benefit from the program than they currently do. Furthermore, without a national accountability mechanism to ensure that standards were met, children's health would suffer if States' set -- or alter -- standards to meet shifting budgets.

Question: How much money was appropriated for the school lunch program for FY '94?

Answer: School lunch is appropriated as a part of Child Nutrition, which received an appropriation of \$7.5 billion in 1994, plus a transfer of an additional \$400 million from Section 32 to pay for commodity purchases. Of that total, \$4.9 billion supported the National School Lunch Program.

Question: How much of the money appropriated was actually spent on purchasing food for the school lunch program for FY '94?

Answer: Based on study of the cost to produce a meal in the National School Lunch and School Breakfast Programs issued by the Food and Consumer Service in October 1994, I am told food accounts for about 48 percent of reported costs while labor accounts for about 44 percent. Using that percentage, of the \$4.9 billion in funding for the National School Lunch Program, about \$2.4 billion was spent on food.

Question: How much of the money appropriated was spent on non-food purchases for the school lunch program for FY '94?

Answer: Based on the study, about \$2.5 billion was spent on labor and other non-food costs.

Question: Out of the total budget request for the school lunch program, including food purchases, paperwork, staff, etc., what does it cost to feed one child per year?

Answer: Again, based on USDA's school lunch cost study, the average cost to produce a reimbursable school lunch in school year

1992-1993 was \$1.69. If a child ate a lunch every day he or she attended school, about 165 days per year, on average, it would cost about \$279 in FY 1992 dollars.

Question: What reforms do you envision in the school lunch program that will allow less money to be spent on supporting the bureaucracy in the Department of Agriculture and more money to be spent on food purchases to feed children?

Answer: As I mentioned, the Food and Consumer Service will publish final regulations by June 1, 1995, to reinvent the School Lunch Program, improving the nutritional quality of the meals, increasing local flexibility in preparing those meals, reducing paperwork, and streamlining administration. In addition, the comprehensive strategy we have developed to support the regulatory changes, includes a multi-faceted education program delivered through the media, in schools and at home. It brings proven, focused, science-based nutrition messages to children in a language they understand while strengthening support for children's healthy food choices among parents, educators, and food service professionals.

It's important to note at the outset that only a tiny fraction -- less than one-half of one percent -- of the funding spent on the Child Nutrition Programs actually supports "bureaucracy" -- Federal administrative oversight -- in the Department. This oversight is necessary to reduce error in the program and ensure funds intended to assist low income children really go to support meals served to them. Another small portion of the money pays for State oversight of the programs. The remainder is used to purchase food, mostly at the local level, and to pay the labor necessary to prepare the meals.

The Food and Consumer Service has worked to streamline its functions for maximum effectiveness per dollar spent. FCS is already a lean agency. Staffing has been reduced about one third since 1980; and, under our plan for streamlining the Department, it will increase its efficiency rather than its size.

On your broader point, the Department shares your commitment to ensure that Federal resources are focused on providing nutritious food to children, especially needy children, rather than bureaucracy and red tape. The role of nutrition education, training, and technical assistance for food service providers is critical, in making healthy food a reality on the school tray.

We know that the money that enables the Department to give local schools cash and commodities is adequate to provide the food that goes into healthy school meals. The per meal reimbursement rates more than cover the costs of meals currently served; furthermore, we know that the changes needed to make these meals meet national nutrition standards will result in minimal additional food costs.

QUESTIONS SUBMITTED BY SENATOR McCONNELL

ELECTRONIC BENEFIT TRANSFER

Question: In light of the current debate on welfare reform in returning more power and authority from the federal government to the states and given the need to streamline the federal government and achieve government efficiencies, why does the Department see the need to use part of its appropriations to support another federal entity, i.e. EBT Task Force?

Answer: The EBT Task Force is a temporary, multi-agency activity that will no longer be needed once EBT is fully implemented by the States and by the various Federal programs involved. Once

implemented, EBT will in fact achieve efficiencies in many government programs. For food stamps it will reduce costs associated with printing and handling food stamps and reduce opportunities for fraud. Food stamp EBT will also contribute to savings by other programs, since such programs will only need to pay a portion of the base cost of operating EBT. The Departments of Agriculture, Treasury, and Health and Human Services all make financial contributions to support the work of the Task Force.

Question: Does the Department believe that this promotes streamlining the federal government?

Answer: The Department believes that the coordination of Federal activity in EBT related matters through the Task Force does provide a streamlining of the Federal Government. Also, we believe that the implementation of EBT will save both funding and staff resources by eliminating the costs of printing, distributing and accounting for food coupons, and will reduce staffing needs at both State and Federal levels. And, as I mentioned, since EBT is a multi-program effort it helps the other programs save money too. Long term, we believe that programs using EBT will be better coordinated and streamlined, and EBT will help catalyze this process.

Question: How much of USDA's appropriated funds for EBT activities is redirected to the Federal EBT Task Force?

Answer: In fiscal year 1995 the Food and Consumer Service is spending \$1.4 million to support the EBT Task Force, and proposes to spend \$2.0 million for this purpose in fiscal year 1996.

Question: How many staff are detailed from the Food and Consumer Service to the Federal EBT Task Force?

Answer: A total of 4 FCS staff were assigned to the EBT Task Force in fiscal year 1995. One of those has returned to the agency.

Question: Is the Department relinquishing its role and responsibilities for approving EBT projects, as outlined in the Mickey Leland Memorial Domestic Hunger Relief Act of 1990 and implementing regulations of April 1, 1992, to the Treasury Department and the Federal EBT Task Force? Since the Act and regulations clearly provide for the administration of the Food Stamp Program in general and food stamp EBT in particular is the responsibility of the Secretary of the Department of Agriculture, what statute supersedes the Act and provides Treasury its authority?

Answer: The Department is not relinquishing any of its role and responsibilities concerning EBT. In fact, we are the lead Federal agency for States to deal with in EBT matters. USDA has retained its role in reviewing and approving State EBT plans for consistency with program legislation and rules. USDA continues to set policy in EBT matters through our guidance to States and work with other agencies. The Treasury Department's role is to be the settlement agent for all Federal benefit funds - this has not changed over time. Treasury is also the cognizant Department for direct Federal payment programs like Social Security. The Department sees Treasury's role as complementary and particularly helpful in working with the Federal Reserve to minimize the potential impact of Regulation E on our EBT programs.

FOOD STAMP FRAUD AND ABUSE

Question: What financial support does the Department provide for investigating and pursuing trafficking violations? How many staff are involved?

Answer: In fiscal year 1994 the Department spent about \$14.4 million and devoted about 184 staff-years to investigate trafficking

and other fraudulent use of food stamps and EBT cards, primarily involving retailers. Of these amounts \$4.2 million and 69 staff-years were provided by Food and Consumer Service, with \$10.2 million and 115 staff-years provided by the Office of Inspector General. State and local officials also commit a large number of staff and resources to stopping trafficking, although we do not have a reliable estimate of this involvement.

Question: How much are states spending on "quality control" efforts to identify erroneous food stamp benefits? To what extent are states devoting staff resources to "correct actions" to reduce the degree of erroneous payments?

Answer: The Food Stamp Program requires States to review a sample of cases in their jurisdictions to determine the levels of error applicable to both over and under issuances. In fiscal year 1994, State agencies spent \$42.8 million in State and Federal funds to perform quality control activities. These activities included case reviews which were conducted in a sample of cases to determine whether the household was eligible and, if eligible, whether the household received the correct allotment.

In addition, State agencies take corrective action to reduce and prevent overpayments before they occur. These actions include utilizing special review teams to identify and solve errors in error prone cases, expanding training for certification workers, and increasing anti-fraud activities such as pre-certification investigations by investigators in suspicious cases. While we know State agencies are doing these activities, I'm told that FCS does not have data to quantify the staff resources devoted to these types error reduction activities. However, we do know that under the terms of the January 19, 1993 settlement agreement for fiscal years 1986-1991, Food Stamp Quality Control Liabilities, States agreed to invest approximately \$45 million into payment accuracy improvements over a five year period. The settlement of these liabilities provides States with additional resources for improving payment accuracy and improved administration of the Food Stamp Program.

Every State recently made a commitment to bring their error rates down. They propose activities such as special review teams to identify and solve error problems in particular areas and expanded training for certification workers. Further, States establish claims for overissuances and seek restitution from the recipients. Recipient expectation that over issuances will be sought later in claims has a deterrent value.

Question: How much are states spending to pursue collection of overpayments and penalties for fraud? How does this compare to actual collections?

Answer: In fiscal year 1994 States spent \$164.7 million in State and Federal funds on anti-fraud activity. The State's share of the anti fraud expenditure was \$64.0 million. However, the anti fraud cost includes costs for investigations prior to certification to prevent fraud as well as investigations after certification to detect fraud, prosecutions and disqualification activity, and claims activity to recover overissuances due to fraud. We believe only a small portion of the \$164.7 million in State and Federal anti-fraud expenditures would be devoted by State agencies to establishing and collecting fraud claims. No estimate is available for the cost of collection activity for other types of recipient claims collections.

In fiscal year 1994 fraud claim collections were \$44.4 million. This does not include collections stemming from investigations in which no fraud was found, but an inadvertent household error was found. In addition, there would be the benefit savings from disqualifications stemming from an intentional program violation and from appropriately denying benefits to people who lied about their circumstances on their applications and, if the misrepresentation

was not discovered, may have qualified for participation or for a higher level of benefits than the law provides.

Total claim collections in fiscal year 1994, including claims due to fraud, inadvertent household error, and State agency error, were \$148.1 million. The following table provides data on claims incurred and collected from 1988 through 1994, along with State and Federal funding of overall anti-fraud efforts.

[The information follows].

QUESTIONS SUBMITTED BY SENATOR HATFIELD

NORTHWEST FOREST SUMMIT

Question: Mr. Secretary, of this commitment made by the Department of Agriculture in the Interagency Memorandum of Understanding, how much has been provided by your Department during FY 1994 and FY 1995.

Answer: USDA programs identified by the President and contained in the Interagency Memorandum of Understanding have provided funding as follows (FY 1995 figures are through May 8, 1995):

Pacific Northwest Economic Timber Adjustment Presidential Initiative

Amounts Funded in Fiscal Year 1994

California:

Rural Business Enterprise Grants	\$1,449,200
Community Facilities Direct Loans	\$1,536,000
Water and Waste Disposal Loans	\$11,105,000
Water and Waste Disposal Grants	\$2,827,300
Intermediary Relending Program Loans	\$2,000,000
Business and Industry Program Loans	-0-

Oregon:

Rural Business Enterprise Grants	\$2,981,750
Community Facilities Direct and Guaranteed Loans	\$3,177,200
Water and Waste Disposal Loans (*\$7,809,500)	\$11,110,700
Water and Waste Disposal Grants (*\$1,762,300)	\$8,758,300
Intermediary Relending Program Loans	\$1,900,000
Business and Industry Program Loans	-0-

Washington:

Community Facilities Direct Loans	\$5,819,400
Rural Business Enterprise Grants	\$2,169,950
Water and Waste Disposal Loans (*\$4,567,200)	\$16,801,100
Water and Waste Disposal Grants (*\$1,512,300)	\$9,273,300
Intermediary Relending Program Loans	-0-
Business and Industry Program Loans	-0-

**Pacific Northwest Economic Timber Adjustment
Presidential Initiative**

Amounts Funded in Fiscal Year 1995 Through May 8, 1995

California:

Rural Business Enterprise Grants	-0-
Community Facilities Direct and Guaranteed Loans	-0-
Water and Waste Disposal Loans	\$7,707,500
Water and Waste Disposal Grants	\$7,098,500
Intermediary Relending Program Loans	\$1,200,000
Business and Industry Program Loans	-0-

Oregon:

Rural Business Enterprise Grants		\$460,200
Water and Waste Disposal Loans	(*\$6,264,000)	\$19,039,000
Water and Waste Disposal Grants	(*\$2,000,000)	\$10,579,800
Community Facilities Direct Loans		\$5,857,700
Intermediary Relending Program Loans		-0-
Business and Industry Program Loans		-0-

Washington:

Rural Business Enterprise Grants	\$1,137,860
Water and Waste Disposal Loans	\$7,538,400
Water and Waste Disposal Grants	\$6,567,800
Community Facilities Direct and Guaranteed Loans	\$606,000
Intermediary Relending Program Loans	\$500,000
Business and Industry Program Loans	-0-

* These amounts were included in totals but were not in the Forest Plan per State identification for FY 1994 and 1995.

Question: Are these funds in addition to base funding, or are you repackaging existing funding that would have found its way to the Northwest anyway?

Answer: In the process of allocating funds for the Pacific Northwest Initiative, States were given their regular program allocation of funds. In addition to the regular program allocation for each State, additional funds were made available from National Reserves in order for the amount established in the Memorandum of Understanding to be made available. Under the Intermediary Relending Program (IRP) funds are not allocated to States, rather they are held in the National Office for funding projects on a priority points basis. Nevertheless, the National Office made available funding in the amount of \$16 million from the National IRP allocation to fund projects under this initiative. Therefore, in all cases, funds made available exceeded baseline allocations.

Question: In addition, how much are you requesting in your FY 96 budget for these programs.

Answer: In the Presidents FY 1996 Budget the Administration is requesting the following amounts for USDA programs covered under the Interagency Memorandum of Understanding for Economic Adjustment and Community Assistance.

Program	FY 96 Budget Request Program Level (Million Dollars)
Rural Business Enterprise Grants	\$4.10
Water and Waste Disposal Loans/Grants	\$87.12
Intermediary Relending Program Loans	\$16.00
Community Facilities Direct Loans and Guaranteed Loans	\$41.64
Business and Industry Guaranteed Loans	<u>\$35.31</u>
Total	<u>\$184.17</u>

QUESTIONS SUBMITTED BY SENATOR BUMPERS

TRADE EMBARGO WITH IRAN

Question: Many in agriculture have been heartened by your statement that you intend to serve as an advocate for farmers and ranchers. Over much of our history, farmers have often felt their interests were subservient to policies of the State Department. Grain embargoes of the past are evidence of the great harm to the farm economy that can result in U.S. foreign policy initiatives when someone is not also looking out for U.S. agriculture.

President Clinton is now suggesting an embargo of trade to Iran and I don't mean to question the foreign policy implication of that decision or the merits of the President's proposal. However, this action has serious consequences for agriculture and, in particular, the rice industry which is important to my state. Iran has been one of the most prominent export markets for U.S. rice and, in 1994, 75 percent of Iran's rice imports came from the U.S.

Presently, there is a pending \$45 million transaction relating to rice sales in Iran which is put at risk due to the embargo. I understand you and the Secretary of the Treasury can ask for a 6-day extension of the embargo's effect for certain purposes. Do you feel that a pending sale of this magnitude would qualify for your close examination and, to what extent can you assure U.S. farmers that farm policy will not be dictated by the Secretary of State?

Answer: As Secretary of Agriculture, I am responsible for representing the interests of American agriculture in the development of policy, and I can assure you that I will do so vigorously. In the case of the recently announced action against Iran, if any exporter of U.S. agricultural commodities requests a license from the Department of the Treasury for an extension beyond June 5, 1995, to complete a transaction under an existing contract, the Secretary of Treasury can grant the extension. This includes sales of U.S. rice to Iran. The President has directed the Secretary of Treasury to authorize such exports of agricultural commodities provided the contract requires delivery of the commodities within 270 days of May 7, 1995. Treasury's consideration of a request for such a license will be carried out on

a "case-by-case" basis. Treasury would ordinarily consult with the Department of Agriculture if the eligibility of a particular agricultural transaction is in question.

Question: As a follow-up, could you comment on the role of traditional commodity programs -- now under attack by some in Congress -- as a means of helping protect farm income when agricultural markets are threatened in times such as these?

Answer: I believe that traditional commodity programs provide an important and much-needed safety net for U.S. farmers, and this is particularly the case given the volatility of world markets. Because of our natural resources and the productivity of American farmers, we produce more than we consume of all the basic commodities. Exports have become increasingly important for U.S. producers. As our reliance on world markets has grown, economic and political developments overseas have increasingly influenced the price and income levels of American producers.

While the Uruguay Round Agreement will help to level the playing field for agricultural producers around the world, U.S. farmers still face stiff competition from foreign producers who continue to receive sizeable subsidies from their governments. The end result of commodity subsidies, such as those offered by the European Union, is increased supplies entering world markets, which drives down the price and profitability of U.S. commodities and adds to the volatility of U.S. prices and incomes. In effect, U.S. producers not only have to compete against foreign producers but foreign governments as well.

QUESTIONS SUBMITTED BY SENATOR JOHNSTON

Earlier this year, I brought to your attention two very important issues included in President's FY 1996 budget request relating to agriculture research that impact the U.S. sugarcane industry and nutrition research in the Lower Mississippi Delta. I would like to follow-up on specific questions I raised with Dr. Floyd Horn when ARS testified before the Subcommittee last month.

HOUMA, LOUISIANA ARS RESEARCH FACILITY

Question: Regarding the recommended closure of the ARS Houma Research Station, I understand that ARS did not initially recommend closure of the ARS research facility in Houma, Louisiana included in the President's FY 1996 budget, because ARS had not completed the evaluation of this facility as directed in Report 103-542, which accompanied P.L. 103-330, the FY 1995 Agriculture Appropriations bill. Is this correct? Do you agree that these evaluations directed in last year's conference report should be completed? In the absence of these facilities how do you see the role of USDA in sustaining the effectiveness of agricultural research?

Answer: It is correct that in the formative stages of the development of the FY 1996 budget proposals ARS did not recommend closure of its research facility in Houma, Louisiana. If the Houma facility remains open in FY 1996, I agree that a thorough re-evaluation of the facility's program and resource use effectiveness should be completed as directed in last year's conference report. As I am sure you are aware USDA did review its Federal laboratories in 1992. If the Houma facility does close, USDA has plans to ensure that the most essential research needs of the Louisiana sugarcane industry continue to be addressed at its other research laboratories located elsewhere in the Nation. It also will be necessary for USDA to work with Louisiana state and industry research partners to strengthen their role in helping to sustain the effectiveness of agricultural research.

Question: One option that has been discussed to reduce the federal costs of administering the Houma facility and continue ongoing critical research is to designate this facility as a satellite or worksite unit of the Southern Regional Research Center (SRRC) in New Orleans. Could this be done administratively by USDA? If so, what level of funding would be needed under such actions to maintain ongoing research activities at Houma in FY 1996? Also, what level of budget savings could be accomplished by such actions as compared to any costs that will be associated with the closure of this facility?

Answer: Yes, it is possible to administratively align the sugarcane research program at Houma Louisiana with the much larger Southern Regional Research Center (SRRC) located at New Orleans. As a practical matter, however, only the laboratory-oriented research now conducted at Houma could be conducted onsite at SRRC. Since most of the Houma research is field-oriented, these activities could not be carried out at the SRRC, or very efficiently directed from that location. Total closure of the Houma facility and program will save \$1,382,500 annually. If the Houma facility remains open for sugarcane field research, and the balance of the program--laboratory research and administration--is transferred to New Orleans, we estimate that \$1,000,000 and \$275,000 will be required at Houma and New Orleans, respectively. This alternative plan would result in a net savings of \$107,500 annually.

Since I have been a member of this Subcommittee, I have actively pursued funding initiatives based on recommendation of the Lower Mississippi Delta Development Commission which was chaired by President Clinton when he was Governor of Arkansas to help address the critical needs in this area. One exciting new initiative developed from the Commission's recommendations and supported by this Subcommittee was initially funded in P.L. 103-330 and included in the President's FY 1996 Budget Request. This initiative designated six institutions in Louisiana, Mississippi and Arkansas to participate in a multiyear human research intervention initiative in the Lower Mississippi Delta.

DELTA NUTRITION INITIATIVE

Question: Have any long-range plans, funding needs and specific roles of the participating institutions and ARS been determined? Can you please provide the Subcommittee with any recommendations you may have as to any further Congressional actions that are needed to facilitate the success of this multi-year human nutrition research initiative?

Answer: Long-range plans for the Lower Mississippi Delta nutrition intervention research project include assessment of nutritional needs and the design and implementation of nutrition programs to meet the needs. These interventions will be monitored to measure progress, assess benefits relative to costs, and to assure sustainability. The first three years involve project planning and pilot testing of the research methodology. During the subsequent five years, nutritional assessments of representative samples of the lower Delta population and implementation of intervention strategies will be carried out.

For FY 1996, ARS is requesting an additional \$1.0 million which will raise the total budget for the project to \$2.5 million. Original plans for the initiative called for an increase of \$2 million per year for each of five years in order to reach a target total level of \$10 million base funding per year to effectively carry out the nutrition research and intervention initiative.

ARS and the six institutions from Louisiana, Mississippi, and Arkansas comprise a seven member partnership. All of the partners share equally in the funding and will be involved in both planning and execution of the program. ARS serves an additional role to

provide coordination and oversight for the overall program. Specific program roles of each of the seven partners have not yet been finalized. A Steering Committee comprised of one person from each of the seven institutions has been formed and detailed planning is now underway.

BUDGET REDUCTION AND FARM PROGRAM SPENDING

Question: Given the current proposals under consideration for deficit reduction in the area of USDA Commodity Programs and Foreign Assistance Programs, do you support or foresee significant changes in these programs?

Answer: At President Clinton's behest, I intend to practice advocacy agriculture--for farmers and ranchers as well as for the Department of Agriculture, and for all Americans, who benefit from an ample supply of food at reasonable prices.

This Administration supports the need to maintain the economic viability of American farmers. We believe it is appropriate for Government to share, to some extent, the risks inherent in farming. However, we also think that the future for farming in America lies in continued movement toward a more market-oriented agriculture.

I foresee and support significant changes that will make sense for American agriculture, changes that will loosen the constraints of current policy. As new opportunities present themselves, America's producers should be able to take advantage of those opportunities. Farm program restrictions and regulations could not stand in the way. Farmers must be able to make more of their own decisions and have more flexibility.

We intend to announce our farm bill recommendations next week. Our recommendations will be designed to sustain the farm and food programs that have produced history's most abundant, most affordable, and most wholesome food supply. Our recommendations will maintain a level of investment we believe critical to sustaining our food and fiber system, especially given the dramatic spending reductions agriculture has absorbed over the last decade.

Question: What priorities has USDA recommended in its FY 1996 budget to maintain U.S. competitiveness in the world market?

Answer: The performance of the U.S. agricultural economy is highly dependent on international markets. Export success is essential to the prosperity of U.S. agricultural producers because growth in domestic demand will be inadequate to absorb the growing productivity of U.S. agriculture. Because the Uruguay Round of the General Agreement on Tariffs and Trade does not eliminate export subsidy competition or eliminate all restrictions on market access, U.S. producers will continue to face some, although more limited, subsidized competition and other barriers that may limit their export opportunities.

The fiscal year 1996 Budget does not include farm bill proposals for commodity price and income support programs. However, reductions estimated at \$1.5 billion are contained in the budget. Specific measures to achieve the savings will be proposed at a later date, but the measures I intend to recommend will not reduce the competitiveness of U.S. farmers. One such budget savings measure I have spoken about -- planting flexibility -- would in fact increase our competitiveness.

The budget also includes a total program level of \$8.2 billion in FY 1996 for the Department's international programs and activities, about the same as for 1995. The 1996 proposals have been developed to take advantage of new export sales opportunities that will emerge as a result of the GATT agreement. The budget also includes higher program levels consistent with the Administration's

"greenbox" commitment to increase program levels of USDA export promotion and related programs by \$600 million over the next 5 years. Included in the "greenbox" proposals are the implementation of a new supplier export credit guarantee activity; an expansion of Food for Progress; and increased funding for the Foreign Agricultural Service for an expansion of its overseas offices, trade shows, and the Foreign Market Development Cooperator Program. The budget also includes supplemental appropriations language to increase funding for the Market Promotion Program to its fully authorized level of \$110 million in FY 1995 and continues this level for FY 1996. Further, the budget recommends stable or increased funding for the broad areas of research programs needed to maintain the competitive position of U.S. agriculture. In addition, there are specific efforts to find new uses for agricultural commodities and to transfer technologies to private firms through Cooperative Research and Development Agreements.

Question: Has USDA included any specific recommendations in the FY 1996 budget that would improve the quality of the environment in rural America without additional financial burdens on the farm community?

Answer: The President's 1996 budget for the Consolidated Farm Service Agency includes requests for three separate voluntary programs that target environmental concerns. The largest is the Conservation Reserve Program (CRP), with a proposed FY 1996 appropriation request of \$1.926 billion. The CRP, which provides annual rental payments to farmers who retire environmentally sensitive cropland from crop production, has been tremendously beneficial for both producers and the general public. The Agricultural Conservation Program, which provides financial assistance to farmers to help solve a wide range of agricultural conservation and environmental problems, is included in the budget with an appropriation request of \$50 million. The Emergency Conservation Program, which provides financial assistance for the rehabilitation of farmland damaged by floods, hurricanes, or other natural disasters, is included in the 1996 budget with an appropriation request of \$3 million. The total Consolidated Farm Service Agency direct environmental and conservation program 1996 budget request is a little over \$1.979 billion.

In addition to the direct conservation and environmental programs, commodity price and income support program outlays contribute to the quality of the environment in rural America without creating net financial burdens on the farm community. Precise estimates of the price and income support programs' contributions are subject to debate, but it is clear that the contributions are positive and significant.

The total budget for the Natural Resources Conservation Service in FY 1996 is just over \$1 billion and will provide significant levels of conservation technical and financial assistance to rural America. This includes \$646 million for Conservation Operations most of which will be used on direct technical assistance to land users for the purpose of developing and carrying out local conservation programs. The Department's streamlining plan will increase the percentage of NRCS employees in the field in order to improve our overall services to farmers and to provide them with the needed technical assistance to implement and maintain their conservation compliance plans. The \$210 million request for the Wetlands Reserve Program will enable us to increase the acquisition of easements in support of the Administration's goals for protecting and restoring wetlands. Watershed Operations is requested at \$100 million to implement a new watershed approach that focuses resources on the most cost effective and environmentally beneficial projects. Finally, the Resource Conservation and Development program will be continued in 1996 at a requested funding level of \$29 million. This locally directed program has been very successful in helping rural

communities plan, develop and carry out resource conservation and economic development programs.

Question: There is a lot of concern among Louisiana farmers over the negative impact of declines in land value if funding for Farm Programs be eliminated or cut drastically. Some fear the possibility of increased rent if landlords compensate for such cuts in terms of raising the rent to tenants. What is your position concerning this issue and what measures would you recommend for preserving a healthy rural economy and farm income?

Answer: Commodity programs definitely affect resource use and land values. My understanding is that land values would likely drop about 10-15 percent, and would be more variable in the future, if commodity programs were eliminated or severely cut back. The sudden elimination of commodity programs would likely cause short-term losses in farm income and could send severe shock waves throughout agriculture and all of rural America. In addition, if commodity programs were eliminated, the decline in land values would impact farmers' ability to obtain credit by reducing income available for repayment of loan principal and interest.

Specific Administration guidance on the 1995 farm bill will be released on May 10, 1995. However, in general, I believe the next farm bill should empower farmers and ranchers, not encumber them. Introducing more flexibility into our commodity programs, on a phased-in basis to minimize disruptions, will let American agriculture do what it does best -- meet the needs of its customers -- and it will remove the sometimes heavy hand of government from private decision making.

EXPORT PROMOTION/TECHNICAL ASSISTANCE TO VIETNAM

Question: Since lifting the embargo and the recent opening of the U.S. Liaison Office in Hanoi, has USDA taken actions to establish markets for U.S. agricultural products within the Republic of Vietnam? Could not the FMD, MPP, EEP, DEIP, and other export assistance programs be used to facilitate the movement of U.S. agricultural products to Vietnam? If not, what are the barriers to facilitating U.S. involvement in this potential market which has a great demand for certain agricultural products? For example, I understand Vietnam has urgent requirements for dairy products. Has USDA considered the DEIP to penetrate this market?

Answer: While the U.S. trade embargo with Vietnam has been lifted, U.S. Government policy continues to restrict the use of U.S. Government funds in the market. An interagency committee chaired by the State Department has authorized only limited Federal aid to Vietnam--primarily medicine and prosthetics. Use of any Federal trade promotion funds, including Foreign Market Development Cooperator and Market Promotion Program funds, is restricted to market research projects. Use of the Dairy Export Incentive Program and Export Enhancement Program is currently prohibited. Despite the current restrictions, USDA personnel have begun establishing contact with a variety of Vietnamese government and private sector contacts in an effort to exchange information on possible areas of future cooperation in agricultural trade and development between the two countries.

SUBCOMMITTEE RECESS

Senator COCHRAN. Our next hearing is going to be on May 10 at 10 a.m., in this same room. We will hear at that time from the Department of Agriculture witnesses on the fiscal year 1996 budget request for the Department's Food, Nutrition, and Consumer Services programs.

Thank you. The subcommittee is recessed.

[Whereupon, at 11:32 a.m., Wednesday, May 3, the subcommittee was recessed, to reconvene at 11 a.m., Wednesday, May 10.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

WEDNESDAY, MAY 10, 1995

**U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
*Washington, DC.***

The subcommittee met at 11 a.m., in room SD-138, Dirksen Senate Office Building, Hon. Thad Cochran (chairman) presiding.

Present: Senators Cochran, Burns, Bumpers, and Kohl

DEPARTMENT OF AGRICULTURE

STATEMENT OF HON. ELLEN HAAS, UNDER SECRETARY, FOOD, NUTRITION, AND CONSUMER SERVICES

ACCOMPANIED BY DENNIS KAPLAN, OFFICE OF BUDGET AND PROGRAM ANALYSIS

FOOD AND CONSUMER SERVICE

STATEMENT OF WILLIAM LUDWIG, ADMINISTRATOR

ACCOMPANIED BY GEORGE BRALEY, ASSOCIATE ADMINISTRATOR

OPENING REMARKS

Senator COCHRAN. The hearing of the subcommittee will please come to order.

First, let me express my sincere appreciation to our witnesses for cooperating with our subcommittee, for attending the hearing. We reschedule from time to time to try to accommodate other interests and concerns.

As it turns out, with business on the floor of the Senate, we are likely to be interrupted with some rollcall votes on the floor this morning. But, we hope that we get lucky and maybe we can complete action on this phase of our hearings.

This is the last hearing that this subcommittee will have with Department witnesses on the subject of the President's proposed budget for the next fiscal year for the Department of Agriculture and Related Agencies.

We are pleased to have attending this hearing Ellen Haas, Under Secretary for Food, Nutrition, and Consumer Services, with colleagues, whom I will ask you to introduce.

We note that funding for the programs of this agency represents about 63 percent of the total budget authority proposed for all programs and activities under the jurisdiction of this Appropriations

Subcommittee. So, it is quite an important part of the budget in terms of the total resources that are requested to be allocated to it in the budget.

The Food Stamp Program; the Child Nutrition Programs; the Special Supplemental Nutrition Program for Women, Infants, and Children are among the domestic food assistance programs funded in the bill.

The Food and Consumer Service programs and activities for the next fiscal year are proposed at a level of \$42 billion, which is an increase of almost \$1.9 billion above the current level.

I noticed in the Budget Committee chairman's report yesterday that there are assumptions that savings can be made in these programs over the next 5 years to try to help reduce the cost of Government and deal with the problem of the ever increasing Federal debt that we all agree has to be addressed, but continues to be put off by the administration.

The budget submitted by the President calls for an increase in the deficit for future fiscal years compared to this fiscal year, and that is a source of great disappointment to me. In many ways, I think there has been a lack of commitment to do something effective about the deficit by the administration.

I hope that there can be a proposal made for legislative changes, which would have to be made in order to have an effect on this committee's action with respect to the budget request.

Most of these programs are so-called mandatory spending or entitlement programs. We are required to fund them to pay for the benefits that accrue to those who are eligible under the law for the benefits.

This committee cannot change the law, but the legislative committee can. I assume that as a part of the farm bill or other legislative actions that will be taken this year, the Congress will try to restrain the growth of these programs and get them under some degree of control so that we will not see continued increases of significant proportions in the costs of these programs over the life of that legislation.

In addition to those introductory comments, I should also add my hope that we will have a sufficient allocation of funds to meet our commitments to these programs this year. I certainly hope for that.

We will be working with our friends on the Budget Committee to help ensure that that allocation is forthcoming under the budget resolution and then through the further work of the Appropriations Committee, when we undertake to divide the money that is allocated to us for discretionary spending among the various subcommittees of Appropriations.

Well, let me again welcome Ms. Haas. We appreciate the work you are doing and the challenges that you face. We invite you to make whatever comments you would like at this time. We have your prepared testimony, and it will be made a part of the record in full. You may proceed.

STATEMENT OF ELLEN HAAS

Ms. HAAS. Thank you very much, Mr. Chairman.

I do appreciate very much the opportunity to be here today. I have always appreciated the support that you have personally

given to the nutrition programs, and the opportunity that we have had over the years to work together on crafting these programs so that we can get food to people who need it.

Today I am joined by Mr. Bill Ludwig, the Administrator, Food and Consumer Service, Mr. George Braley, our Associate Administrator, and Dennis Kaplan from the Office of Budget and Program Analysis.

As you mentioned, I have the responsibility for the Nation's 16 food and nutrition programs which form a network of Federal nutrition support, built over one-half of a century.

These include our three anchor programs of Food Stamps, Child Nutrition Programs, and the Special Supplemental Program for Women, Infants and Children.

USDA's programs have always served a dual mission, improving the Nation's health by getting food to people who need it and strengthening our agricultural economy. As you said a moment ago, we do represent 63 percent of the Department's budget. Nutrition is the link between agriculture and health. It is a very important part of the coalition of farmers and consumers and it is crucial to achieving our dual purposes.

The original mission of USDA's programs was to achieve specific health outcomes by preventing hunger and promoting good nutrition. And they have been strikingly successful in meeting that mission. The gap between the diets of low income and other American households has narrowed; we have reduced growth stunting by nearly 65 percent in children; the prevalence of low birth weight babies has dropped dramatically; and iron deficiency anemia among low-income preschoolers has decreased significantly.

The administration is committed to building on these achievements by integrating the latest nutrition knowledge more fully into each program. With the right changes, we can ensure that nutrition programs not only offer access to nutritious food, but also enable recipients to make healthy food choices.

An important step was the Department's reorganization last year of the nutrition promotion functions into the Center on Nutrition Policy and Promotion. The Center serves as the Department's focal point for enhancing the nutritional status of Americans by linking scientific research to the American consumer. It provides an infrastructure for coordinating activities within USDA and also with other Federal agencies. I might add that we have begun, this year, to work closely with the Extension Service and the Agricultural Research Service in meeting that mission.

The administration's fiscal year 1996 budget request for nutrition programs reflects a broad and comprehensive vision for the future, a vision that embraces change and emphasizes nutrition in all 16 programs.

Today, I would like to focus my remarks specifically on our reform agenda for our three anchor programs.

CHILD NUTRITION PROGRAMS

First, let's talk about the Child Nutrition Programs.

These include the School Lunch and School Breakfast programs. They have been strikingly successful in improving the nutrition

and health of America's children ever since they were first started by President Truman in 1946.

We know today how much diet is linked to health, how children's learning ability can be affected by the eating patterns they have, and how those eating patterns are formed by the time they are 12 years old. We also know that the three leading causes of death are diet related. Because childhood nutrition is so important to health in later life, these programs have a special role in promoting health and preventing disease.

The School Meals Initiative for Healthy Children, which we proposed last June, is the first full-scale reform of this program since it was first established in 1946. It updates our nutrition standards so that school meals meet the Dietary Guidelines for Americans. It cuts administrative redtape. We are also improving the nutrition profile of USDA commodities that are provided to the schools, as well as enhancing their availability.

This is a comprehensive, integrated reinvention plan, which will assure that children have access to healthy school meals that taste good, look good, and appeal to kids. We will see that participation increases in this program as well.

As part of this strategy, to ensure that students and school food service personnel also have the skills necessary to make diets healthy, USDA has established Team Nutrition. This is a new way of doing business at USDA.

Team Nutrition brings together a wide array of stakeholders—from the American Heart Association to the National Cattlemen to the American School Food Service Association to the PTA, as well as hundreds of other groups—in public and private partnerships to implement a national children's nutrition campaign. This campaign has been carefully designed to motivate children to make healthier food choices and give them the skills to do so by reaching them through the media, in schools, in their community, and at home.

We also are mounting a training and technical assistance program that helps school food service personnel deliver school meals that model the principles of optimum nutrition and taste.

There is clear, documented evidence that a properly designed nutrition education campaign can make real changes in dietary behavior and improve health.

A number of well-established studies have documented the ability of nutrition interventions to change behavior and improve health. Furthermore, such dietary changes are not only powerful ways to improve health, they can also save a great deal of money. Well-designed nutrition education is effective, and it is cost effective.

We are now developing research-based, action-oriented messages, targeted to children by age, to encourage them to make healthy food choices by adding fruits, vegetables, and greens, and constructing a diet that is lower in fat. We also want children to include a variety of foods in their diet. The campaign is USDA's first comprehensive effort to reach children through channels they use, in a language they speak, along with parents, educators, and others who care about them.

USDA has already formed a ground-breaking partnership with the Walt Disney Co. to develop healthy eating messages to be used on the Disney Channel and other television channels.

Pumbaa and Timon, two of the characters from Disney's blockbuster movie "The Lion King," are going to be the spokes-toons for these messages. They are going to also travel around to schools. When you think that "The Lion King" has been seen by one in two children today, you know that these messengers will deliver important science-based messages about nutrition in a way that children are going to receive them.

USDA has also entered into a partnership with Scholastic, Inc.—the largest educational services going into the 92,000 schools across the country. Along with Scholastic, Inc., we are going to deliver age-appropriate nutrition information to children in school and to their parents at home.

I would like to add that we are particularly pleased to have the National Food Service Management Institute as a partner in several of the Team Nutrition activities. We have other activities planned which include comic books with comic book leaders, music videos, and video games. These are all ways to incorporate nutrition messages in a way that children are going to receive them and act upon them.

The Team Nutrition Training and Technical Assistance Plan is designed to ensure that school nutrition and food service workers have the education, motivation, training, and skills necessary to serve meals that meet USDA's nutrition standards and also appeal to children. We have begun to implement this plan by offering training grants, competitively funded, to help States offer training programs that help local school districts implement the new nutrition standards.

FOOD STAMP PROGRAM

The Food Stamp Program is the next area that I would like to discuss. As you know, it is the cornerstone of our Federal efforts to fight hunger and improve nutrition. It is part of our national nutritional safety net for children and families.

It promotes the health of the Nation by providing nutrition benefits to approximately 11 million households—that is approximately 27 million people—more than 80 percent of which include children, elderly, or disabled persons.

More than 20 percent of recipient households have some kind of earnings from work, making the program a critical source of nutritional support for working, poor Americans.

This morning, I joined Secretary Glickman—and I appreciated your accommodation of our timing very much—where we released the new 1995 farm bill guidance from the administration. We released and announced a significant reform proposal for the Food Stamp Program. This reform proposal is a responsive alternative for change. The proposal grew out of a year-long, thorough review of the program. We looked at its shortcomings and we looked at its tremendous successes. We involved program participants, State officials, food producers and retailers, and many others.

Our reinvention plan is founded on six principles for change. We start with providing for nutrition security, improving program in-

tegrity, modernizing benefit delivery, expanding State flexibility, ensuring economic responsiveness, and promoting personal responsibility.

Our reforms will strengthen the program's nutrition focus. It will ensure that benefits are issued and used properly and will remove the layers of unnecessary redtape and regulation that can stand in the way of State flexibility.

Mr. Chairman and Senator Kohl, we believe that the Food Stamp Program has made a tremendous difference in the lives of the Americans it serves. We are committed to retaining its national structure.

We also believe that our reform proposal represents an opportunity to build on the program's strength while ensuring it can continue to perform the vital function of getting food to people who need it.

Between block grant proposals and staying with the status quo, we believe that the administration's reform proposal offers a real alternative that will make the right changes that the Food Stamp Program needs to meet the needs of the future.

Other important program changes are well underway. For example, the administration has been working closely with States so that by the end of 1996, nearly all of our States will be working to implement the Electronic Benefits Transfer Program, a single card, user-friendly, uniform benefit delivery program.

Also, earlier this spring, the Department introduced a comprehensive strategy to reduce food stamp fraud. As you know, fraud and abuse are perceived by the public as serious threats to the program. I believe that they are, and that we have to act aggressively and decisively. That is why we sent to Congress a 13-point legislative proposal that advances our longstanding commitment to eliminate trafficking and other fraud through a three-tiered attack.

Our reform proposals for the Food Stamp Program will also see to it that we have an administratively more flexible program. At the same time, we will be meeting the nutrition needs of the next century.

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN

Our third anchor program is the WIC Program, and it is one where President Clinton has shown a very strong commitment to invest. This is reflected in our budget request.

The evidence has been clear that WIC is not only cost effective, but also that the program's three components, which are a nutritious food package, nutrition education, and a gateway to pre- and postnatal health care, result in tangible improvements in the health of participants. These include fewer premature births, a lower incidence of low birthweight, fewer infant deaths, and a greater likelihood of receiving prenatal care.

Our 1996 budget calls for an increase of almost 10 percent above the fiscal year 1995 appropriation. This increase will help us to fund an additional 400,000 participants each month, bringing us to approximately 7.4 million participants per month.

Mr. Chairman, throughout their history, the nutrition assistance programs I administer have enjoyed broad bipartisan support. They have done so because the needy families and children that they serve, and the significant health outcomes they have achieved, really transcend party politics.

Last year, this subcommittee, on a bipartisan basis, produced legislation that made historic investments in programs that will result in healthier children and a healthier America.

This year, the administration is ready to work with you, the committee, and with Congress to build on these efforts to promote the health of the Nation by improving the nutrition of children and low-income American families.

I would be happy to take any questions that you have at this time.

PREPARED STATEMENT

Senator COCHRAN. Thank you, Ms. Haas. We have your complete statement, and it will be made part of the record.

[The statement follows:]

PREPARED STATEMENT OF ELLEN HAAS

Mr. Chairman, Senator Bumpers, and Members of the Subcommittee, thank you for the opportunity to present the President's budget for the nutrition programs for the coming fiscal year. I am Ellen Haas, Under Secretary of Agriculture for Food, Nutrition, and Consumer Services. I would like to introduce Mr. William Ludwig, Administrator of the Food and Consumer Service, who is with me today.

I have responsibility for the Nation's 16 food and nutrition programs, a network of Federal nutrition support, built over half a century, that includes the anchor programs of Child Nutrition, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), and the Food Stamp Program. These programs collectively touch the lives of one in five Americans.

USDA's programs serve a dual mission: improving the Nation's health by getting food to people who need it, and strengthening our agricultural economy. By linking America's agricultural abundance to the health and well-being of millions, nutrition programs form a bridge between agriculture and health.

This nutrition link is based on our understanding of how a plentiful and nutritious diet results in improved health. The original mission of USDA's programs was to achieve specific health outcomes by preventing hunger and promoting good nutrition—and they have been strikingly successful in meeting that mission. Since the nationwide expansion of the Food Stamp Program and WIC, the gap between the diets of low-income and other American households has narrowed.

USDA programs have also improved the health of the Nation's children. The incidence of growth stunting has decreased by nearly 65 percent in the last twenty years; the prevalence of low birthweight babies dropped dramatically over the last twenty-five years; and the prevalence of iron-deficiency anemia in low-income preschoolers has dropped significantly since 1980.

These are important achievements. This Administration is committed to building on them by ensuring that all of our nutrition programs are grounded in the latest science, and by working to integrate this knowledge more fully into each Program. With the right changes, we can make sure that the nutrition assistance programs not only provide recipients access to nutritious food, but also to the skills and understanding that enable them to make healthy food choices.

Last year, working in partnership with this Subcommittee, we took important steps to integrate nutrition into the food assistance programs. Perhaps the most significant integration effort was the School Meals Initiative for Healthy Children, a comprehensive, integrated plan to ensure that children have healthy meals at school. The Initiative updated the school meals programs' nutrition standards to be consistent with the Dietary Guidelines for Americans. It also reduced paperwork and administrative red-tape for schools.

As part of this Initiative, recognizing that students also need to be able to make healthy food choices, USDA established Team Nutrition. This effort brings together, through public/private partnerships, a wide array of stakeholders to implement a

National children's nutrition campaign, and a training and technical assistance program to help school food service professionals deliver healthy school meals.

Similarly, we know that all Americans need information and the skills in order to choose healthier diets. We reorganized many of the Department's nutrition promotion functions into the Center for Nutrition Policy and Promotion. The Center serves as the focal point within the Department for enhancing the nutritional status of Americans by linking scientific research to the nutritional needs of the American consumer. The Center provides information which increases public knowledge and understanding of the importance of nutrition, and assists them in making better food choices.

These program reforms are real successes—we are proud of our work as partners in achieving them. The President's budget request for fiscal year 1996 would build on our progress by continuing to incorporate nutrition into the school meals programs, by continuing to integrate nutrition into the Food Stamp Program, and by expanding the WIC Program.

I am confident that we will continue to work together to fulfill the commitment to nutrition reform that we made last year, and to fulfill the programs' mission of ensuring the well-being of the Nation by promoting the nutrition and health of low-income Americans. By continuing to advance reforms, and by focusing on improved nutrition outcomes, we can ensure that the programs will promote the Nation's nutrition and health well into the 21st Century.

CHILD NUTRITION PROGRAMS

The Child Nutrition Programs, including the National School Lunch and School Breakfast Programs, have worked to improve the nutrition and health of America's children for nearly half a century. By providing cash reimbursements and commodity donations to States, updating National nutrition standards, and providing technical assistance, these programs ensure that children and other dependent citizens get nutritious, affordable meals.

Because childhood nutrition, and good dietary habits learned early, are so important to health in later life, these programs have a special role in promoting health and preventing diet-related disease.

Our efforts to reform USDA's nutrition programs began with the school meals program. The School Meals Initiative for Healthy Children, proposed last June, is the first full-scale reform of the program since it was established by President Truman in 1946.

The proposal, which will be finalized this year, updates nutrition standards so that school meals meet the Dietary Guidelines for Americans. Administrative red-tape will be cut. And we are improving the nutrition profile of USDA commodities provided to schools as well as enhancing their availability.

As part of this strategy, to ensure that students and school food service providers have the skills necessary to make diets healthier, USDA established Team Nutrition. Team Nutrition is a new way of doing business at USDA, bringing together a wide array of stakeholders in public/private partnerships to implement:

- A multifaceted, National children's nutrition campaign designed to motivate children to make healthier food choices and give them the skills to do so by reaching them through the media, in schools, in the marketplace and at home.
- A training and technical assistance program that helps school food service professionals to deliver school meals that model the principles of optimum nutrition and taste.

The Department developed the children's nutrition campaign because of the clear evidence that a properly designed campaign can make real changes in people's dietary behavior—and improve health. For example, the MRFIT (Multiple Risk Factor Intervention Trial) project, a comprehensive health and nutrition intervention developed by the National Institute for Health, resulted in a 40 percent reduction in dietary cholesterol, a 25 percent reduction in saturated fat, and a three-and-one-half pound reduction in weight among middle-aged men.

The National Cholesterol Education Campaign, which used both clinical and public education to encourage behaviors that reduce cholesterol, resulted in significant reduction in the number of Americans with elevated cholesterol, a reduction in consumption of dietary fat as a percentage of calories, and an increase in the proportion of the public who have been screened for serum cholesterol.

Behavior changes are not only powerful ways to improve health—they can also save money. Even the relatively small changes in dietary intake expected to result from the Food and Drug Administration's changes in food labeling are expected to result in \$4.4 to \$26.5 billion in cost savings for the U.S. adult population over the next 20 years. The much larger changes that could result by developing good dietary

habits in young children could reduce the costs in health care and lost productivity from diet-related disease by far more. Nutrition education is effective, and it is cost-effective.

The campaign's theme is "making healthy food choices". We are developing action-oriented messages, targeted to children, to encourage them to eat a balanced diet, to increase consumption of fruits, vegetables, and grains, and to make lower fat choices. The campaign is USDA's first comprehensive effort to reach children through channels they use, in a language they speak. We also will work to reach other audiences, such as parents, educators, and school food service professionals, that play vital roles in teaching children to improve their diets.

The campaign is focused on sending messages at school and through the media, but also makes extensive use of the community and the marketplace to amplify the messages and leverage our resources. Through the use of these public-private partnerships, USDA will extend the reach of the campaign, and diversify our ability to deliver messages through a wide variety of channels.

This effort is already producing significant results. USDA has already formed a groundbreaking partnership with the Walt Disney Company to develop healthy eating messages to be used on television. Pumbaa and Timon, two characters from Disney's blockbuster movie "The Lion King," will be used to help children learn about healthy eating habits in lively, entertaining, and memorable ways. USDA has also entered into a partnership with Scholastic, Inc., to deliver age-appropriate nutrition information to children in school and to their parents at home. Possible future projects with other partners include comic books and video games that incorporate nutrition messages. We are particularly pleased to have the National Food Service Management Institute as a partner in several of the activities we are developing as part of Team Nutrition.

The Team Nutrition Training and Technical Assistance Plan is designed to ensure that school nutrition and food service personnel have the education, motivation, training, and skills necessary to serve meals that meet USDA's nutrition standards and appeal to children. The strategy focuses on three major components: establishing training standards and developing and identifying resources to assist State and local Agencies to meet them; developing an infrastructure to deliver training at National, Regional, State and local levels; and supporting an incentive program to promote and encourage schools that successfully utilize training resources and implement coordinated programs.

We have begun to implement this plan by offering Team Nutrition Training Grants, a program of competitive funding to help States offer training programs that help local school districts implement the new nutrition standards. Up to twenty-five State grants may be funded this year. We are confident that States will use these new resources to develop cost-effective training programs that can help schools in providing nutritious meals that taste good.

Team Nutrition offers an exciting new vehicle for improving the nutrition and health of children. It is a critical component of the School Meals Initiative for Healthy Children, and is already making a difference in the diets of students, and in the health of the Nation.

This Subcommittee has been instrumental in supporting the School Meals Initiative with the funding necessary to make real reform possible. Last year, Congress recognized the importance of the changes we have proposed to the program during reauthorization of the Child Nutrition Programs, when it set a deadline for this year to complete a final rule to improve school meals. This year's budget request will complete this updated framework for healthy meals at school, and begin to provide the tools necessary so that students can make healthy choices, and school food service professionals can implement the new nutritional standards necessary, to improve the nutrition and health of our children.

FOOD STAMP PROGRAM

The Food Stamp Program is the cornerstone of the Federal effort to fight hunger and improve childhood nutrition. It promotes the health of the Nation by providing nutrition benefits to approximately 11 million households, more than 80 percent of which include children, elderly, or disabled persons. More than 20 percent of recipient households have some kind of earnings from work, making the Program a critical source of nutritional support for our Nation's working poor.

The President's 1996 budget request does not propose major funding changes. However, USDA will shortly present proposals to reform and reinvent the Food Stamp Program. The proposals grow out of a year-long, thorough review of the program—its successes and shortcomings—involving program participants, State case workers, food producers and retailers, and many others. Our reinvention plan is

founded on six principles for change—to provide for nutrition security, improve program integrity, modernize benefit delivery, expand State flexibility, ensure economic responsiveness, and promote personal responsibility.

While the Food Stamp Program's tremendous successes in getting food to the people who need it have been well-documented, it is also clear that much can, and should, be done to improve the Program. One of the Department's top priorities is to promote nutrition security by integrating nutrition more fully into the Program. We are exploring methods of updating nutritional standards, and working to encourage States to establish integrated nutrition education efforts in every State to ensure that program participants have the skills they need to use their benefits to choose a healthy diet.

Other important program changes are well underway. For example, the Administration has been working closely with States so that by the end of 1996, nearly all States will be working to implement electronic benefit transfer (EBT), a single card, user-friendly, uniform benefit delivery system. Through EBT, a greater emphasis will be put on State/Federal coordination of programs and benefits. Under the leadership of the Vice President, we are moving rapidly to achieve full implementation of this important new technology.

Similarly, in March USDA introduced a comprehensive strategy to eliminate Food Stamp Program fraud. As you know, fraud and abuse are perceived as serious threats to the Program. Our strategy advances our longstanding commitment to eliminate trafficking and other fraud through a three-tiered attack, involving:

- screening of food retailers entering the program to ensure that only legitimate stores participate;
- monitoring of food retailers to identify promptly anyone defrauding the program, and immediately suspend them; and
- stiffer penalties for violators, including debarment and forfeiture of property gained through Food Stamp fraud.

Promoting Food Stamp Program integrity is a central part of our responsibility to taxpayers to ensure that Program benefits are used only as intended—for food. It remains a top Administration priority.

In sum, our reform proposals will transform the Food Stamp Program into a National nutrition security program that provides administrative flexibility and meets the nutrition needs of the next century. The Administration's current budget request is a part of that effort.

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN

President Clinton has a strong commitment to invest in the WIC Program, and this is reflected in the budget request. The evidence is clear not only that WIC is cost-effective, but also that the program's three components—a nutritious food package, nutrition education, and a gateway to pre-and post-natal health care—result in real improvements in the health of participants. Studies have shown that prenatal WIC participants had fewer premature births, a lower incidence of low birthweight, fewer infant deaths, and a greater likelihood of receiving prenatal care than non-participants.

The fiscal year 1996 budget calls for an increase of almost 10 percent above the fiscal year 1995 appropriation. This increase will help to fund an additional 400,000 participants each month, bringing average WIC participation to approximately 7.4 million per month.

Mr. Chairman, throughout their history, the nutrition assistance programs I administer have enjoyed broad bipartisan support. They have done so because the needy families and children that they serve, and the significant health outcomes they have achieved, transcend party politics.

The Administration is ready to work with the Congress, and the Members of this Subcommittee, to build on the good beginning we've made together. The President's budget request for Food, Nutrition and Consumer Services is designed to advance the goals we all share—improved nutrition and better health for all Americans. I urge its careful consideration.

This summarizes the fiscal year 1996 budget request for the Food and Consumer Service. I would be pleased to answer any questions the Committee may have. Thank you for your attention.

FOOD STAMP PROGRAM—REFORM PROPOSAL

Senator COCHRAN. Let me ask a couple of questions to get us started, and then I will yield to my good friend from Wisconsin for any questions or comments he would like to make.

First, in describing the food stamp reform proposal, which is contained in the farm bill guidance, as you have described it, let me ask you: How much will the food stamp reform proposal that you have submitted save the taxpayers?

Ms. HAAS. Our food stamp proposal, as presented, would result in \$550 million in savings over 5 years. If I can add to that answer, Mr. Chairman, I believe the debate we are having today that relates to the Food Stamp Program is on two levels.

On one level we are discussing what kind of Food Stamp Program and structural framework we are going to have in the future. On the other level we are discussing what kind of budgetary savings need to come about.

We believe that the proposal we have offered gets to the heart of the kind of structure we need for food stamps to do the job of getting food to people through the hard times that they face.

At the same time, through the administrative changes we are making to make the program much more flexible for the States, we will realize \$550 million in savings.

FOOD STAMP BLOCK GRANT PROPOSAL

Senator COCHRAN. Some have suggested that the most effective way to reform some of these Federal programs that provide benefits such as housing, food, or other assistance is to turn more of the responsibility over to the States. Some are suggesting block grant programs.

Others, which I favor, simply give the States more flexibility to make the benefits available to try to help meet the special needs that people have in those States. Maybe they are in rural areas or urban areas, and one program may not be as helpful to those in rural areas as in urban areas.

It seems to me that we would be well advised to have more flexibility in our programs. To what extent is your agency cooperating in the effort to be more flexible in terms of requirements and rules and mandates on the States as they administer these nutrition programs?

Ms. HAAS. Well, to begin with, I think we have been cooperating in a number of ways. Certainly we have been a part of the waiver process. When States come to us asking for waivers in the Food Stamp Program, in particular, we have granted a number of waivers over the past year.

But what I am very excited about are these proposals that we have made today. It is a very bold change in the Food Stamp Program to provide the kind of administrative flexibility that we need, while, at the same time, providing the safety net in the national structure and the ability to be economically responsive.

For example, Senator Cochran, today in the issuance and certification of food stamps, we have some very prescriptive statutory requirements that, according to the States, tie them into knots on how they will carry out this program.

We are making suggestions in our proposal that, rather than be prescriptive in how the States should carry out the program, will give them the flexibility to design those kinds of guidelines.

I think we are coming to a new age and that this serious alternative is something that needs to be considered, because you can

then have more responsiveness to State needs, but will have the safety net as well.

Senator COCHRAN. Senator Kohl.

Senator KOHL. Thank you, Senator Cochran.

Ms. Haas, I would like to ask you about food stamps. I have a welfare reform proposal, and in that proposal I provide adequate protection and access to nutrition assistance to children, and I also retain food stamps for the elderly and the disabled. For the remainder of the Food Stamp Program, I block grant the States.

What would be your response to that?

Ms. HAAS. Well, to begin with, I think a Food Stamp Program that has so many different parts to it is only going to make it more complex for the States to administer, at a time when we are all trying to simplify the work that we are doing.

Second, I believe that if you are going to block grant the Food Stamp Program, you are going to jeopardize the health and well-being of many poor Americans who depend on this program. By having a national standard as we have today, we have the ability to respond to economic conditions.

We have a program today that expanded from the beginning of the 1990's when the economy declined. Now, as we experience a recovery, we are starting to see food stamp participation going down every month since last August.

I do not believe that block granting is the way to go, even for a small fraction of the people. Nutrition programs are very different than welfare programs.

Their purpose, as I said before, is to achieve healthy outcomes, and you have to do that with strong national standards. You cannot do that through a block granted program.

Senator KOHL. So block grant on food stamps under any condition is something that you would not be comfortable with.

Ms. HAAS. It is more than uncomfortable. I believe it is the wrong way to go. As Secretary Glickman said today at our press conference, the administration strongly opposes block granting the Food Stamp Program.

I think it would reverse the nutritional achievements we have secured for poor Americans over the last 30 years.

We have seen, since the expansion of the national Food Stamp Program, a decrease in the problems of iron deficiency anemia and growth stunting. We have also seen a narrowing of the gap between the diets of low-income Americans and the general population.

If you move away from those kinds of strong standards and that strong approach, you are going to reverse those kinds of nutritional accomplishments. We oppose that.

Senator KOHL. Any ambiguity in your response? [Laughter.]

Ms. HAAS. Not too much.

Senator KOHL. Thank you, Mr. Chairman.

Senator COCHRAN. Thank you, Senator Kohl.

Senator Burns, any questions or comments?

FOOD STAMP PROGRAM COST

Senator BURNS. I have one question. Thank you very much.

And thank you, Ms. Haas, for coming this morning. You say the Food Stamp Program, the cost of that program could go down because of the increase—or the better economic climate that we have. Is that true?

Ms. HAAS. Yes; in fact, as we have had an economic recovery, it has been slow and in many instances poverty has persisted, but we have seen declining unemployment.

In August of last year, the food stamp participation was 27,180,000. The last time figures were available, in February, it was 26,763,000.

We have consistently been dropping in the number of food stamp participants as we have had a recovering economy. So that ability to automatically adjust to the economic situation and the poverty of low-income Americans is very important to maintain.

SMART CARD

Senator BURNS. Have you all looked into the idea of using a smart card instead of the actual stamp?

Ms. HAAS. Yes; we have more than looked into it. As part of the Vice President's "National Performance Review," one of the priorities has been to accelerate the electronic benefits transfer program. We have a pilot for testing the smart card in Wyoming.

When I came into this job, we had eight States that were at some stage of implementation. We have increased that number five times.

Today there are 40 States in some form of planning to implement electronic benefits transfer.

I think it is a very important, significant way of delivering our benefits more cost effectively. It also is a way of fighting fraud in the Food Stamp Program by cutting down on trafficking.

Today, paper coupons can be traded on the streets for guns, drugs, and cash. If you switch to an EBT card, you are going to reduce that significantly. We have seen that happen, where it has been implemented, like in the State of Maryland.

Senator BURNS. That started, by the way, Under Secretary Madigan, and we had a couple of demonstrations. I thought they were very successful, and then we did not hear a lot about them, which I guess I kind of got the idea from a guy that sells cards, of course, on an airplane.

But I would say that on the south—on Montana Avenue in Billings, MT, you can buy food stamps any hour of the day at 50 cents on the dollar.

And I happen to believe that a smart card, if you look at it, has no value on the street. And I think it also would promote a little bit of responsibility by the people that have that card, to hang onto it because if they do not have the card, they are not going to eat.

Along with that idea, the other day, when we were talking to the Secretary, and I thank you for those, he was sort of in a—as far as the cost of the program is concerned, he said they may rise because we have a rising cost of food. I do not know if you agree with that assessment or—do we see that happening?

Ms. HAAS. Well, one thing that is very important about the Food Stamp Program is that it is linked to food, and it goes back to Sen-

ator Kohl's question about block granting and the issue of do you cash it out. I think the tie to food is critically important.

Food prices tend to fluctuate. In the last year, I think they went up by 4 percent. We have got to be responsive. We have what is called the Thrifty Food Plan, which is the basis for calculating the benefits that individuals get.

So the program rests on and is responsive to food prices. It is responsive to the amount of poverty that exists and the degree of unemployment. All of those contribute to the end point of how much we spend on this program.

FOOD STAMP PARTICIPATION

Senator BURNS. I just want to mention this and this will complete my questions. And I, for one, am one of those folks who think that the Food Stamp Program should stay within the Department of Agriculture.

But do you not find it funny or ironic that our farmers are going to be probably the biggest participants in the Food Stamp Program, that they qualify to get food stamps?

And you are working in a department, I think, that we have to look at the production side and how we feed this society. I have some great illustrations of people that are on our farms and ranches that will qualify for food stamps.

Ms. HAAS. I think it is a sad commentary that there are farmers who are that bad off and are facing such troubled times. The Food Stamp Program's eligibility is based on income.

Senator BURNS. That is right.

Ms. HAAS. If we have a situation where farmers' income is that low, that is a sad commentary. I also was amazed by an article several weeks ago which discussed soldiers, people who are in the Armed Forces, who qualify for food stamps.

Senator BURNS. Exactly right.

Ms. HAAS. As I said earlier, 20 percent of those participating in the Food Stamp Program are working poor, people who are trying to get by troubled times. That is why this safety net is so important.

The composition and the profile of the Food Stamp Program is very different than the myth that is out there concerning who participates in this program.

Senator BURNS. You mentioned Wyoming. Are you from Wyoming?

Ms. HAAS. No; I am from New York.

Senator BURNS. I am not going to bear that cross. [Laughter.]

That is all I have. I just wanted to make a point. As we look at these programs and we look at the people who are responsible for feeding this society—and I think the chairman is concerned about that, too, income on the farm—that we have people that are producing the food that would qualify for a Food Stamp Program.

So it is just not in our cities or among the working poor. We have some people that are just trying to hang on.

Ms. HAAS. Right.

Senator BURNS. And we have to talk about farm income and this type thing. And I would say keep on looking at that smart card. I was an old county commissioner.

We used to stack them darn things up back there in that safe, and you had to hire four or five people to count them in, count them out, and everybody running around down at the treasurer's office.

So I know that there are savings there, and there are also, I think, great savings as far as the fraud that is not rampant, but it is a problem in the food stamp business.

Ms. HAAS. If I can add, another one of our proposals is under modernizing benefit delivery in our food stamp reform. That would be to eliminate several of the statutory barriers for implementing EBT.

We have today, for example, prohibitions against the food retailers bearing any of the costs of EBT when they get a great deal of the benefits.

Also, there is a cap on cost neutrality. So there are issues that would help us move EBT further and faster.

Senator BURNS. Well, I am very supportive of feeding people, and I think everybody in agriculture, who has a background in agriculture, supports that.

And that is the reason, I guess, I am sort of an easy touch for food banks and this type thing, because you just do not like to see hungry people.

Thank you, Mr. Chairman.

Ms. HAAS. I appreciate that, Senator.

CONSOLIDATED APPROPRIATIONS

Senator COCHRAN. Thank you, Senator Burns.

I notice, Madam Secretary, there are several omissions in the budget request as compared with previously enacted budgets.

I look at the Special Milk Program, commodity purchases program under the Emergency Food Assistance Program, and I wonder if there is an analogy there. Is this budget reflecting a new policy by the administration to suggest to children that they should not drink milk as part of the School Lunch Program?

Ms. HAAS. Oh, heaven forbid, anything but that. Milk is very much a part of a healthy diet and very much a part of the School Lunch Program.

Senator COCHRAN. And beef, too?

Ms. HAAS. Why, of course. [Laughter.]

Senator COCHRAN. Get that on record, please. [Laughter.]

Ms. HAAS. Let me just say that special milk is still funded, but it is in a consolidated account. So we do not want to infer that we are making any judgments about any of our food products that are in our food pyramid in any way.

On the TEFAP Program, you did ask if there is a change in the administration's approach. This is consistent with the approach that we took last year.

It is one of setting priorities, Mr. Chairman, and it is one of saying that the important thing is to keep the administrative pipeline open so that food banks can continue to play the very critical role they do in supplementing the Food Stamp Program and other antihunger programs.

So, we have included just the money for the administrative funding. I think it is \$25 million.

Senator COCHRAN. There is \$40 million.

Ms. HAAS. Excuse me, \$40 million. Sorry.

COMMODITY PURCHASES

Senator COCHRAN. \$25 million is the commodity purchases number in the fiscal year 1995 enacted appropriation.

Ms. HAAS. That is correct, but that is a change from the previous policy. Also, as our agriculture policy has changed and we have had a declining amount of surplus, that availability of surplus products has not been there.

What is important is to encourage the food banks, and do it by keeping open the administrative pipeline.

Senator COCHRAN. Are there still plans by the Department to supplement the School Lunch Program with purchases of surplus commodities and the like?

Ms. HAAS. That still will continue, and that occurs with the Agricultural Marketing Service. We have bonus buys which are very much a part of that program. Again, I think this is a win-win situation for farmers and consumers.

I look at our nutrition programs, and Congress has ever since their beginning, as a way to enhance the nutritional status of low-income Americans and strengthen the agricultural economy. That is what we have to continue doing.

I think the commodities that are a part of the School Lunch Program represent \$700 million of our purchases. Where they were high in fat, we have been able to reduce the fat content.

We have improved the nutrition profit. We have been piloting some wonderful 10 percent lean beef patties, for example. We have cut the fat in potatoes that were there as Tater Tots, instead of just the plain potatoes.

So we are continuing to have that linkage between the American farmer and our Nation's schoolchildren.

TEAM NUTRITION

Senator COCHRAN. Before we get to the point of actually writing an appropriations bill for the food and nutrition programs, I am going to go to my State—and I am sure other Senators will do the same or similar thing—and meet with some of the program administrators to find out what their reaction is to the changes that are being proposed in many of these programs.

The School Lunch Program is an example. The Food Stamp and WIC Programs are other examples where some very substantial reform proposals are under consideration, in addition to the ones that you are suggesting the administration is recommending as well.

In that connection, I notice that you have a new program that I was going to ask you about that is called team nutrition.

Ms. HAAS. Yes.

Senator COCHRAN. Is that something new, or is that something old with a new name?

Ms. HAAS. I spoke about it in my testimony.

Senator COCHRAN. Yes; why is WIC being left out of that, or is it being excluded? That was my question.

Ms. HAAS. Is WIC being left out? No; because, as part of Team nutrition and the work we are doing with Scholastic Magazine, we are starting with pre-K, before children get to kindergarten.

Those little children, who are in day care centers and who are WIC children, will have the benefit of this nutrition education. I bet there are lots of 3- and 4-year-olds who are WIC children who have seen "The Lion King" and who are going to love these animated segments that we are doing, using both Pumbaa and Timon, two "Lion King" characters, to promote healthy food choices.

So our WIC children will be very much a part of the beneficiaries of team nutrition, which is one of the most exciting, I think, public/private partnerships to have significant health outcomes for our young children in America.

Senator COCHRAN. Senator Bumpers.

Senator BURNS. Can I have a copy of that, what you are doing with those two whatever you said they were?

Ms. HAAS. "The Lion King" characters?

Senator BURNS. Yes.

Ms. HAAS. Sure. We have not released it yet, but I will be happy, to get you a copy as soon as we do.

We are also going to put them on the front of videos. And you know how little 3- and 4-year-olds and 10-year-olds and people our age watch videos? Well, on the front of those videos are going to be these nutritional messages.

Senator COCHRAN. Senator Bumpers.

WIC IMMUNIZATION AMENDMENT

Senator BUMPERS. Ms. Haas, I just have a couple of quick questions. One deals with the immunization amendment that I offered. You are familiar with that, so I will not belabor that except to say I feel very strongly about that program.

I have charts here, for example, that show how effective this is where it is being tried. In Baltimore, Chicago, every place immunization rates literally doubled among the children of WIC mothers.

So far as the \$10 million is concerned, I know we are getting along on the fiscal year, but I want to get started on it. My amendment, as you know, provides that the \$10 million will come from administrative funds.

I am not wedded to that, and I would be willing to provide some flexibility to the Department as to where they get their funds.

Now, my staff tells me there is likely to be another reallocation in the vicinity of \$35 million before the end of the year, is that correct?

Ms. HAAS. Yes; in July.

Senator BUMPERS. Let me ask you, first of all, your feelings about this whole proposal. And second, what kind of flexibility would be best for you in getting this money for this program?

Ms. HAAS. Well, first let me say, Senator Bumpers, that I share the strength that you have for this proposal. WIC immunization is a very important thing that we have to expand upon.

We are willing to work with you to find a way to make that happen. If the reallocation process is the vehicle, I am committed, and Mr. Ludwig and Mr. Braley are committed, to finding a way of resolving that as soon as we can.

I do not see any reason why we should not be able to make this work.

Senator BUMPERS. Well, now, we have a conference this afternoon where we are going to finalize this with the House. And as I say, right now the language of my amendment provides \$10 million must come out of administrative expense of the WIC Program.

And what I am saying is I am willing to allow you to find it wherever you want to find it, if that will be helpful to you.

Ms. HAAS. That would be very helpful for us to have that flexibility. I think that would be the best way to go.

Senator BUMPERS. I think the House will feel more comfortable with it that way, and I do not think Senator Cochran and I will be hassled on the issue this afternoon.

Ms. HAAS. Right. That is the important thing, so we can get on with delivering those surpluses.

CASH VERSUS FOOD STAMPS

Senator BUMPERS. My second question, Ms. Haas, deals with my ardent and continuing opposition to sending people cash instead of food stamps.

I have tried to be openminded about that, and I have tried to be reasonable. But every single study I see shows that the children's nutrition suffers as a result of that.

It suffers, No. 1, because they have to pay sales tax on their food. It suffers, No. 2, because they are likely to pay their television repair bill faster than they will buy food for their children.

That is not demeaning. I do not mean that to be demeaning to people who are on food stamps. I am simply saying the policy originally for food stamps was that we did not want children especially to go hungry in this country.

And now we are turning around and saying, "We are going to send you money instead of something you can buy food with."

People are always saying, "Well, you know, they spend the money for other things anyway. They sell their stamps and buy whatever."

My response to that is: We try our dead-level best here to design fraudproof programs, but that is not possible. We cannot construct a welfare program, a food stamp program, a school lunch program, especially food stamp and some of these other programs, that somebody cannot figure out a way to rip off.

But for us to participate in the ripoff is something I cannot understand. And I want to ask you your own opinion about how well it is working.

If we are going to have to live with it, what is the best way to make sure this money goes for the children's benefit, or is there a way?

Ms. HAAS. There definitely is a way. There is a way to do both.

To begin with, there are many people in this country who are poor, many who are children, and who are elderly, who need to have the food that the Food Stamp Program provides.

If we are going to get food to people who need it, we need to have the national standards and we need to have the ability to respond to economic downturns. Only a national program with national

standards could do that—only one that clearly links the poor child with the nutrition.

And you cannot do that by cashing out the program, because our studies have shown that you really diminish the food purchasing power by 20 to 30 cents of every dollar's worth of food stamps cashed out if you do that.

If you move to a cashed program or if you move to a block grant-ed program, you jeopardize the health of low-income Americans.

We have seen, since the expansion of the Food Stamp Program, a great closing of the gap between the diets of low-income poor people and the diets of the average American citizen. That would be jeopardized if we do that.

So I agree with you very much and with the administration, rather than going the route of block granting or cashing out, and not wanting to also be in favor of the status quo, because that does not make sense.

This morning, Secretary Glickman announced a very responsible alternative to both of those approaches. It is a responsible alternative to change. At the core of it, we include some very tough fraud reduction approaches.

We presented a 13-point plan that would make sure only legitimate stores participate in the program, and would stiffen the penalties for trafficking. We would make sure that we had the ability to forfeit the assets of any stores that ripped off the system. We really would move on that.

Also, the fraud that people see is a problem of error rates. We lose \$1.8 billion annually. People see that on the news. What we are suggesting is a payment accuracy system, also in our proposal, that would move from being one based on sanctions to one based on incentives so we can get the States to bring down those error rates.

Our approach is to preserve the national standards that get people through tough times, but strengthen the kind of program integrity we have in the program, while giving the States the kind of flexibility they need to carry it out.

Senator BUMPERS. Thank you, Ms. Haas.

Senator COCHRAN. For the information of all witnesses and others in the committee, there is one rollcall vote in progress now and the second bells have rung. There will be two other voice votes and then a final passage vote.

So, because of that and the fact that we have an opportunity to submit questions to you, I am going to suggest that we conclude the hearing now.

Thank you again for attending and for your cooperation with the committee.

SUBMITTED QUESTIONS

We will submit questions, and we ask that you respond to them in a timely fashion. We hope you can do that within a reasonable time.

We may have more questions than usual because of the fact that we have not had an opportunity to discuss all of our concerns and interests with you at this hearing.

Ms. HAAS. I understand.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR COCHRAN

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN (WIC)

Question. The fiscal year 1996 budget requests \$3.8 billion for the WIC program, a \$350 million increase above fiscal year 1995 level.

Are we still on course for full funding of the program by the end of fiscal year 1996?

What additional funding and level of participation in the program would be required to reach full funding?

Answer. The President's fiscal year 1994 budget established the goal of fully-funding the WIC program at 7.5 million participants by the end of fiscal year 1996. The President's fiscal year 1996 budget request for WIC would allow participation to increase to over 7.5 million by the end of fiscal year 1996.

The full funding participation level of 7.5 million reflects an estimate of the WIC eligible population which was based on income and population data from 1991. However, USDA has recently updated its estimate of the number of women, infants and children who are eligible for WIC to reflect the most recent data available (1993). The more recent WIC eligibles estimate suggests that 7.9 million persons would participate in the program if funds were available. This estimate is based upon the 1993 eligibles estimate and does not reflect assumptions about future economic conditions. A description of USDA's most recent WIC eligibles estimate is submitted for the record.

The current WIC eligibles estimate suggests that 7.9 million persons would participate if funds were available. To reach this participation level by September 1996, a fiscal year 1996 funding level of \$3,935 million would be needed.

[The information follows:]

TABLE 1: ESTIMATES OF PERSONS FULLY-ELIGIBLE FOR THE WIC PROGRAM
1991-1993
(in thousands)

	1991 Original	1991 Revised (New Methodology)	1992 Original CPS	1992 Revised CPS (Census Undercount)	1993
Pregnant Women	819	1,203	1,172	1,203	1,286
Postpartum/ Breast- feeding Women	876	907	879	901	926
Infants	1,762	1,760	1,707	1,751	1,798
Children	5,173	5,169	5,468	5,743	6,058
Total	8,630	9,039	9,226	9,598	10,068

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS AND CHILDREN (WIC)

ELIGIBILITY AND COVERAGE ESTIMATES

1993 UPDATE - U.S. and Outlying Areas

OVERVIEW

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a Federal-State nutrition and health assistance program for low-income childbearing women, infants and young children. To be eligible, an applicant must meet three basic criteria:

- 1) Categorical -- Participants must be pregnant women, breastfeeding women up to 1 year after delivery, non-breastfeeding postpartum women up to 6 months after delivery, infants up to 12 months of age, or children up to their fifth birthday.
- 2) Income -- The maximum income limit is 185 percent of the U.S. Poverty Guidelines (e.g., \$27,380 for a family of four as of July 1, 1994). In addition, individuals are automatically considered income-eligible if they receive benefits under the Federal Medicaid, Aid to Families with Dependent Children (AFDC), or Food Stamps Program. Income limits for the AFDC and Food Stamps programs are below the WIC income cutoff; however, in some cases, Medicaid serves persons over 185% of poverty.
- 3) Nutritional Risk -- Participants must be certified by a competent professional (physician, nutritionist, nurse or other health official) to be at nutritional risk. Two major types of risk are recognized: medically based risk, such as anemia, underweight, maternal age, history of pregnancy complications or poor outcomes, etc.; and diet-based risk -- inadequate dietary patterns, as determined by 24-hour food recall or food-frequency analysis.

Estimates of persons eligible for the WIC program are used for several purposes. They provide an indication of the number of persons who would participate in WIC if the program were expanded. As such, the eligibles estimates are the basis for developing program budget estimates used in the President's budget request and the Congressional budget process. Finally, the eligibles estimates provide a basis for estimating program coverage -- that is, for determining what share of the eligible population the program is currently reaching. Because the WIC program is not an entitlement program, the eligibles estimates are of critical importance in determining funding levels.

BACKGROUND

In March 1993, FCS estimated that in 1991, 10.6 million persons were income-eligible for WIC, and that 8.6 million were also at nutritional risk and thus fully eligible for the WIC program. This updates the estimate to 1993, when an estimated 12.4 million women, infants and children were income-eligible for the WIC program, and 10.1 million were fully-eligible. In 1992, an estimated 11.8 persons were income-eligible for the program and 9.6 million were fully eligible. The current estimate incorporates both methodological changes (which results in greater consistency with the methodology used by CBO to estimate WIC eligibles) and use of more recent demographic and income data. The major changes reflected in the current estimate are:

- Use of 1993 and 1994 Current Population Survey (CPS) income data rather than 1992 CPS data
- Methodological changes, primarily use of demographic information from the 1990 Decennial Census rather than the 1980 Census, and the addition of estimated Medicaid-adjunct eligibles
- Adjustment for the Census undercount

In order to provide some indication of the relative importance of methodological changes, the Census undercount adjustment, and year-to-year income changes, Table 1 provides a historical table which includes:

- the published 1991 estimate
- a revised 1991 estimate which reflects the change to a new methodology
- a 1992 eligibles estimate which was based on the originally-released 1993 CPS
- a revised 1992 eligibles estimate which is based on a special, undercount-adjusted revised 1993 CPS
- a 1993 estimate based on the 1994 CPS (which includes an undercount adjustment).

1993 ESTIMATE OF WIC ELIGIBLES

Based on the March 1994 Current Population Survey (CPS), FCS estimates that 10.1 million women, infants and children were fully eligible for the WIC program in 1993, a 16.6 percent increase over the number estimated eligible in 1991. A total of 12.4 million women, infants and children fell below the WIC income eligibility limit in 1993, a 16.9 percent increase over the number estimated as income eligible in 1991.

However, a substantial portion of this apparent increase in eligibles from the 1991 estimate to the current estimate is due to methodological changes (approximately 28% of the increase) and the impact of the Census undercount adjustment (approximately 25% of the increase). Thus the previously-released 1991 eligibles estimate and estimated coverage rates shown in the table are not directly comparable to the new estimates.

Eligibility and Coverage Estimates- 1993 and 1991

	1993 Eligible (000)	CY 1993 Partic. (000)	1993 Coverage (%)	1991 Eligible (000)	CY 1991 Partic. (000)	1991 Coverage (%)
Pregnant Women	1,286	673	52%	819	730	89%
Postpartum & Breastfeeding	926	731	79%	876	425	49%
Infants	1,798	1,757	98%	1,762	1,603	91%
Children	6,058	2,910	48%	5,173	2,296	44%
Total	10,068	6,071	60%	8,630	5,054	59%

Despite the significant increase in the estimated number of WIC income-eligibles, increases in average monthly participation (over 1 million from 1991 to 1993) allowed overall program coverage to remain approximately 60 percent in 1993. In addition, these eligibility and coverage estimates do not factor in increases in participation that have occurred since 1993. The WIC program has continued to grow; in FY 1994 WIC participation averaged 6.5 million women, infants and children per month.

Estimated coverage of pregnant women is approximately 52 percent for 1992. This represents the proportion of women at all stages of pregnancy who are participating in WIC. The reduction in the estimated coverage rate from 1991 to 1993 is primarily due to an improved estimate of the number of eligible pregnant women. Thus the change in the estimated coverage rate from 1991 to 1993 does not reflect a reduction in coverage of pregnant women. Because women are very unlikely to participate in WIC for a full 40 weeks of pregnancy, this rate should be expected to be significantly below 100%.

In addition, the presentation of program participation data for pregnant, postpartum and breastfeeding women for 1993 has been adjusted to reflect the fact that WIC program regulations allow postpartum and breastfeeding women to continue to be certified as pregnant for up to six weeks postpartum. As a result, WIC program participation data for pregnant women actually reflects the participation of a significant number of breastfeeding and postpartum women. In order to compare program data to the eligibles estimate, an adjustment is made to the participation data for pregnant women to remove the estimated number of postpartum and breastfeeding women recorded in that category. Likewise, the participation data for breastfeeding and postpartum women is increased to reflect women in those categories who were actually reported in the pregnant category. As a result of this change, as well as increased participation in this category, coverage of postpartum and breastfeeding women increased from 49 percent to 79 percent. Estimated coverage of children rose slightly, from 44% to 48%.

The estimate of 10.1 million WIC eligible persons in 1993 assumes that about 4 out of 5 income eligible persons are also at nutritional risk and thus fully eligible for the WIC program. The estimates of pregnant, postpartum and breastfeeding women are based on the count of infants from the CPS and relationships found in the 1990 Decennial Census.

FUTURE DEVELOPMENT OF WIC ELIGIBLES ESTIMATES

The estimates of WIC eligibles presented here incorporate the most current data available, and FCS believes they represent a significant improvement over previous estimates. For example, the 1993 estimate includes an adjustment for the Census undercount. However, it is anticipated the estimates will continue to be modified and updated as more current data become available and efforts to improve the estimation methodology continue.

In particular, FCS intends to update the assumptions about percentages of income eligible persons at risk when new national health and nutrition survey data become available. In addition, FCS is currently studying monthly income and program participation data from the Survey of Income and Program Participation (SIPP) to assess the monthly income dynamics surrounding pregnancy. This analysis may provide a basis to further update the methodology, which currently is based exclusively on annual income data.

WIC PARTICIPATION UNDER FULL FUNDING

Based on the 1993 eligibles estimate, FCS estimates that 7.9 million persons would participate in a fully-funded WIC program. This assumes that, on average, approximately 80% of all persons fully- eligible for the program would participate in WIC if funds were available. This estimate also assumes that a portion of the WIC-eligible population (approximately 120,000 persons) would continue to be served by the Commodity Supplemental Food Program (CSFP).

Previously, FCS estimated that 7.5 million persons would participate in a fully-funded program, based on the 1991 WIC eligibles estimate.

WIC INFRASTRUCTURE

Question. In the past, some states have expressed concern about being able to handle additional funds even while there were eligible participants because there was no way to deliver benefits to them. What infrastructure problems are some states continuing to experience in expanding WIC participation?

Answer. While overall WIC participation continues to increase, some States are experiencing continued difficulty in expanding caseload to funded levels. While the reasons for limited growth vary by State, the most common challenges faced by WIC State agencies that restrict caseload expansion are limited facility space, problems in recruiting and retaining professional staff, and a strained public health care system to accommodate increased WIC referrals. Inadequate automation systems needed to support increasing services are also cited as a barrier to growth. Finally, State budget laws and policies may prevent the WIC State agency from using Federal funds to hire staff needed to process more participants, thereby restricting growth.

In an effort to help alleviate problems encountered by WIC State agencies, FCS and States have been developing strategies to ensure that program growth is manageable and occurs without compromise to quality services. States that have a higher number of unserved eligibles have been working diligently to add participants and to develop the infrastructure necessary to support program growth. State agencies have focused on both short term and long term planning for infrastructure needs, including assessment of staffing levels, facilities and ADP structure and planning capabilities at the State, local, and clinic level.

To assist States in their expansion efforts, the Department has been authorized to allocate up to \$10 million to WIC State agencies specifically for development of infrastructure, special State projects, and special breastfeeding promotion and support projects. Of this amount, the Department has allocated \$7 million to WIC State agencies for State-specific infrastructure grants to help support the overall goal of reaching more participants and providing quality program service. The categories of infrastructure funds include automated information systems, immunization data systems, electronic benefit transfer (EBT) projects, integrated data systems, clinic management technologies, and facility renovation and purchase.

Question. I understand that the Office of General Counsel is looking at allowing States to contract directly with rural health clinics as one way to overcome infrastructure problems. Can you give us a status report on this.

Answer. The Office of Management and Budget (OMB) is proposing a change which will encourage nonprofit organizations to acquire building space necessary to administer Federal programs such as WIC. This policy would allow nonprofit organizations operating WIC and other Federal programs to recover the cost of mortgage interest on the space used by these programs. Local Government organizations operating WIC and other Federal programs are already allowed to recover such costs.

This policy proposal was published as OMB Circular A-122 (Cost Principles for Nonprofit Organizations) revision on September 16, 1994. Circular A-122 would allow nonprofits to claim interest costs associated with space acquired after the new policy's effective date. However, it does not provide relief for interest on existing buildings. The final circular is expected to be published in the near future.

WIC MISSION

Question. I understand that the Maternal and Fetal Nutrition Council has recommended to USDA that WIC's original mission be affirmed. The Council is concerned that Congressional mandates over the past six years that WIC provide a number of other services: (1) goes beyond the capacity of WIC and its original mission; (2) exceeds the scope and training of WIC staff; (3) requires a commitment of time that is not feasible for WIC clinics; and (4) dilutes the original program objectives. Furthermore, the Council indicates that these additional services involve initiatives that are also the primary mission of other State or Federal agencies.

Do you agree that WIC is being required to offer too many additional services, a number of which are the mission of other agencies, compromising its ability to deliver nutrition services to its participants? What surveys have been done on this and what efforts are being made, if any, to reduce these requirements?

Answer. Two of the recommendations contained in the Council's 1994 report relate to "unfunded mandates" which the Council states are hindering the Program's ability to perform basic services intrinsic to the WIC program. The Council considers these unfunded mandates to include providing service to special populations such as women in prison, immunization coordination, and drug abuse prevention education. The Council recommended that Congress reaffirm in future legislation the original intent of WIC. Namely, that WIC is designed to safeguard the health and well-being of low-income women, infants and children who are at nutritional risk by providing nutritious foods, nutrition education, and health care referrals.

However, in the letter transmitting this report to the President and Congress, former Secretary of Agriculture,

Mike Espy, stated that the Department does not support the Council's recommendations as they minimize WIC's important role as an adjunct to health care, and as a major maternal and child health care program. Many of the functions that are referred to as "unfunded mandates" are still well within WIC's mission to provide nutrition education and counseling and the goals of service integration.

The purpose of the WIC program, as stated in WIC legislation, includes serving as an adjunct to good health care during critical times of growth and development, to prevent the occurrence of health problems, including drug abuse, and improve the health status of these persons. In its adjunct role, WIC is charged with referring participants to appropriate health and social services, as well as assisting them in making sound decisions and choices to prevent the occurrence of health problems and to improve their health status. Given WIC's extensive reach into an especially at-risk population, it is critical that WIC continue to play a strong role as a referral point or "gateway" to link this highly vulnerable population with health, medical, and social services. Further, WIC's funding level has increased each year, resulting in an increase in the amount of funds available for nutrition services and administration, which are available in support of WIC's adjunct and referral role.

In summary, we do not believe that WIC is being required to offer too many "additional" services. Clearly, nutrition services represent WIC's primary mission in support of improved maternal and child health. However, these services cannot be as nearly effective if they are delivered outside an integrated framework of public health services. Like Head Start, WIC has achieved its record of services addressing the needs of its clients comprehensively.

NATIONAL VOTER REGISTRATION ACT OF 1993

Question. I note that the Council has specifically called for an amendment to the National Voter Registration Act of 1993 to exempt the WIC Program from the requirement to provide voter registration services. Do you support this recommendation? If not, why?

Answer. In its 1994 report, the National Advisory Council on Maternal, Infant and Fetal Nutrition recommended that Congress amend the National Voter Registration Act (NVRA) of 1993 to exempt the WIC program from providing voter registration service. In the letter transmitting this report to Congress, former Secretary of Agriculture, Mike Espy, stated that the Department does not support this recommendation.

The Department is fully committed to the intent of the NVRA which is to encourage individuals to register to

vote. In fact, the Department has taken aggressive steps to facilitate implementation of the NVRA by WIC State agencies. For example, the Department has issued four policy memoranda which promote implementation and provide detailed guidance and technical assistance to State WIC agencies. One of these clearly established that costs associated with implementation in WIC clinics are allowable WIC costs. In addition, Departmental WIC staff have attended meetings throughout the country to provide training and additional technical assistance to WIC State agency representatives on implementation of the NVRA in a manner that minimizes burden and is least disruptive to current WIC program procedures.

WIC RECOVERY

Question. The fiscal year 1996 budget indicates that \$150 million in fiscal year 1994 WIC funds will be recovered for use in fiscal year 1995, up from the original estimate of \$120 million projected in the President's fiscal year 1995 budget. While the WIC program's funding structure and reallocation process yields a certain amount of funding carried forward to the next fiscal year, the fiscal year 1994 recovery balance reflected in the President's budget is the highest it has ever been. I note it is 4.7 percent of the fiscal year 1994 appropriation, as compared to 1.3 to 3.5 percent of prior year appropriated amounts in the previous four fiscal years.

What explains the size of the fiscal year 1994 WIC recovery?

Answer. During the fiscal year, some State agencies are unable to spend their entire WIC grant. Unlike entitlement programs, WIC State agencies must stay within a grant level, which usually encourages some measure of underspending. For example, food cost fluctuations and infant formula rebate changes make it more difficult for States to estimate actual costs. Most States do not have State monies available in the event they overspend. FCS estimates that approximately \$75 million, or approximately 2 to 3 percent, is the minimum amount of funds that can be expected to remain unspent at the end of a fiscal year, given the nature of the WIC program.

To ensure that any unspent funds are redirected to State agencies that need them, FCS has the authority to recover these prior year unspent funds. These funds are reallocated, based on the WIC funding formula, to States with unserved eligible participants. This helps to ensure that the fewest cases possible go unserved due to lack of funding. WIC's reallocation mechanism ensures that the maximum number of recipients receive benefits, that States receive funding that matches their needs as closely as possible, and that the Federal government provides resources to States as efficiently and cost-effectively as it can.

The majority -- 58 percent -- of funds reallocated in fiscal year 1994 were not distributed until July. This late distribution of funds makes it difficult for States to expend all the funds by the end of the year.

We expect that two changes to the funding process will help reduce the level of unspent funds at the end of fiscal year 1995. First, the Department distributed fiscal year 1995 food funds using a new funding allocation formula. The new funding formula assures more equitable funding for each State based on their WIC eligible population. The food funding formula provides program stability by maintaining each State agency's prior year operating level and encourages program growth by providing a greater share of funds to those State agencies receiving comparatively less than their fair share of funds based on their WIC eligible population. These "growth" States have been working diligently to develop the infrastructure necessary to support program growth.

The second change is an April reallocation of WIC funds during the year. This is in recognition of the need to reallocate prior year unspent funds to State agencies as quickly as possible.

WIC FARMERS' MARKET NUTRITION PROGRAM

Question. A recent GAO report proposes that funding for WIC Farmers' Market Nutrition Program be eliminated. This recommendation is based on the rationale that: (1) the program diverts resources from the total WIC program, (2) that the program fails to distribute benefits on the basis of unmet need, (3) that farmers' markets are not uniformly available, and (4) that neither WIC participants nor farmers fully benefit from the program. Do you agree with GAO's assessment of the WIC Farmers' Market Nutrition Program?

Answer. The WIC Farmers' Market Nutrition Program (FMNP) is an important link to on-going, nutrition education in the WIC program, and we do not believe funds should be eliminated. It is currently available in 26 States, the District of Columbia, and three Indian Tribal Organizations. Survey data from participating State agencies indicate that the FMNP has had a positive effect on both its recipients and participating farmers. In fiscal year 1994, FMNP enabled 542,830 nutritionally-at-risk WIC participants to purchase nutritious fresh fruits and vegetables from their local farmers markets.

WIC COST CONTAINMENT

Question. Critics worry that cost containment efforts will disappear if WIC is block-granted. Yet the idea of cost containment in WIC was born in the states, not in the federal government. The National Association of WIC Directors Cost Containment Task Force outlined cost

containment options in the Fall of 1986, including competitive bidding. Tennessee and Oregon pioneered the use of competitive bidding/rebates in 1987.

Is it fair to criticize efforts to turn over federal programs to the states on this basis when the states led the way in cost containment?

Answer. In its oversight role, FCS has aggressively monitored WIC State agencies to ensure that they continue to seek competitive, sole-source bids when their existing rebate contracts expire. Recent program history suggests that in the absence of such Federal oversight, States may relax their efforts to pursue maximum rebate savings and may engage in practices that are inconsistent with competitive bidding requirements.

For example, FCS recently required one large State to rebid their infant formula rebate contract, rather than extend their existing contract non-competitively as they had planned. As a result, significant increased rebate savings will be available to the State for further program growth. At the National level, it is imperative that States continue to aggressively pursue increased savings since the demand for WIC services exceeds available funding.

Rebates have increased from \$36 million in fiscal year 1988, which was prior to legislation mandating competitive sole-source rebates, to over \$1 billion in fiscal year 1995. In the absence of infant formula rebates, the WIC program would have to reduce average monthly participation by an estimated 1.6 million in fiscal year 1996 or seek a 25 percent increase in its appropriation.

Without National standards, some States may work aggressively to maintain cost-containment measures, but others may not. Only a National system of standards can ensure that taxpayer dollars are used as efficiently and effectively as possible in every State.

WIC PARTICIPANTS

Question. What additional WIC participants were served by the program in fiscal year 1994 as a result of savings from infant formula rebates negotiated by the States and manufacturers? How many additional participants do you project will be served in each of fiscal years 1995 and 1996 as a result of savings provided by rebates? Are these additional participants included in the total number of participants you project will be served by the WIC program in each of fiscal years 1995 and 1996?

Answer. USDA estimates that infant formula rebate savings allowed the WIC program to serve an additional 1,475,000 participants each month in fiscal year 1994. Rebate savings are projected to remain at the current

level and support 1,575,000 participants each month in fiscal year 1995 and 1,590,000 participants in 1996.

WIC participation projections for fiscal years 1995 and 1996 include those participants supported by rebate savings.

Question. WIC allows participants with incomes up to 185 percent of the federal poverty level. I understand that about 62 percent of all WIC participants fall under 100 percent of the federal poverty level. The other 38 percent have incomes over the poverty level.

How does WIC compare to other health and welfare programs - such as Medicaid, AFDC, SSI - in the percentages of participants with incomes above the poverty level?

Answer. WIC participants' income distribution is comparable to other health and welfare programs. Data available from the U.S. Census for 1991 provides the proportion of participants with income above the poverty line. The information is submitted for the record.

[The information follows:]

Program	Participants with Income Above the Poverty Line
WIC	38 Percent
Medicaid	35 Percent
AFDC or General Assistance	20 Percent
SSI	56 Percent

Question. GAO estimated in 1990 that the federal government spent \$296 million on prenatal WIC benefits and these benefits averted \$853 million in health related spending during the first year of life. This and similar studies result in the widely-used statistic of \$3 saved for every \$1 spent on WIC. Yet, in 1992, 93 percent of all eligible infants were enrolled in WIC, compared to only 54 percent of eligible pregnant women.

Does this participation mix result in the greatest health value, or might some other mix produce greater health results?

Answer. The results of studies of prenatal WIC participation suggest that participation in WIC is highly cost-effective, resulting in savings in health care costs of up to \$3 in the first 60 days of life for each \$1 spent on WIC, and even greater savings when measured over longer periods of time. With such strong indications of

the cost-effectiveness of serving pregnant women, the questions that have been raised implicitly are:

- Why does coverage of pregnant women appear low compared with coverage of infants?
- Are pregnant women given high enough priority in the Program? and
- Would enrolling pregnant women earlier produce even greater value to society?

According to USDA's estimates for 1993, 52 percent of all fully-eligible pregnant women participated in WIC during their pregnancies, compared with 98 percent of all fully-eligible infants. The methodology used to estimate WIC eligibles was revised between 1991 and 1993.

The estimated coverage rate for pregnant women compares average monthly WIC participation by pregnant women to the estimate of the number of eligible pregnant women at all stages of pregnancy in an average month. Full coverage would require that all eligible women participate for the entire duration of their pregnancies. In practice, very few women participate in WIC for the full nine months of pregnancy because they may not even know they are pregnant for six or more weeks, and may wait several more weeks before seeking care. Therefore, even if WIC served all eligible pregnant women for some portion of their pregnancies, estimated coverage rates would still be significantly below 100 percent.

The WIC program uses a priority system to ensure that limited WIC funds were targeted to those most in need. The priority system comprises seven priority levels. Higher priorities must be served before lower priorities when resources are insufficient to serve all who apply. According to this system, pregnant women may be served as Priority I or Priority IV, depending on the nature of their risks. Similarly, infants may be served as Priority I or Priority II.

In practice, according to data from USDA's most recent (1992) Study of Participant and Program Characteristics (PC92), the vast majority of pregnant women are served as Priority I, compared with slightly less than half of all infants. Of those enrolled in April 1992, 89 percent of pregnant women were Priority I, and 5.7 percent were Priority IV; 45.4 percent of infants were Priority I, and 45.6 percent were Priority II. (For the remaining 5.3 percent of women and 4.9 percent of infants, no priority level was reported).

Since most State agencies were serving participants up through Priority VI between June 1993 and July 1994, and most pregnant women are being served as Priority I, the Department does not believe that the priority system is

at fault. Moreover, it does not appear that any pregnant women who apply are being denied benefits.

The WIC program has always recognized that early and regular care are important to a healthy pregnancy and delivery, and is committed to providing benefits to pregnant women. The findings of the recent cost-benefit studies have only added emphasis to what many in WIC have believed all along, and increased the program's sense of its mission. Efforts to increase early prenatal enrollment have increased since 1988 at all levels -- Federal, State and local. Efforts at the Federal level have included increased coordination with other programs, legislative changes making it easier for participants in other Federal programs to qualify for WIC, and research aimed at identifying the characteristics of WIC participants and nonparticipants, the determinants of participation, and barriers to early enrollment. State and local efforts have included dissemination of information to health care providers, and direct outreach to participation through media campaigns, and the use of itinerant/mobile services.

INFANT FORMULA

Question. Women served by the WIC program breast-feed at lower rates than other U.S. women. According to a GAO report, in the hospital, over 66 percent of non-WIC babies are breast fed but only 39 percent of WIC mothers eligible for free formula breast-feed their babies. After three months, 42 percent of non-WIC babies are breast-fed, compared to just 19 percent of WIC babies.

Also, of the \$3.6 billion allocated to WIC for fiscal year 1995, only \$24 million must be spent on breast-feeding promotion. This represents less than one percent of the WIC budget for 1995. A majority of state WIC directors favor using a portion of formula rebates for breast-feeding education and promotion.

Is it good health policy to encourage poor women to bottle-feed rather than to breast-feed by providing free infant formula?

Answer. As a minimum, legislation determines what percent of the WIC budget must be spent on breastfeeding promotion and support. For example, for fiscal year 1994, Congress earmarked \$8 million for breastfeeding promotion and support in WIC. Recent legislation (Public Law 103-448) replaced the \$8 million target level with a National minimum breastfeeding promotion and support expenditure of \$21 for each pregnant and breastfeeding woman, including an annual adjustment for inflation. At that level, for fiscal year 1995, WIC State agencies would spend well over \$21 million on breastfeeding promotion and support.

According to expenditure reports for fiscal year 1994, the actual figure expended by WIC State agencies for breastfeeding promotion and support was approximately \$29 million; this far exceeded the \$8 million target for that fiscal year.

With regard to using a portion of formula rebates for breastfeeding education and promotion, the Department's Office of General Counsel has reviewed this issue and determined that rebate dollars are an offset to food outlays and therefore rebate monies must be used for food expenditures. They cannot be used as administrative dollars to fund activities such as breastfeeding education and promotion.

The Department has historically promoted breastfeeding as the optimum infant feeding method, unless medically contraindicated. Renewed emphasis has been placed on this objective since 1989, when Federal funds were first earmarked specifically for this purpose.

It is important to keep in mind that women who enroll in WIC are, by virtue of their age, income, education, and other factors (including risk status), among those least likely to breastfeed in the U.S. WIC educates all women participants about the benefits of breastfeeding and provides support and encouragement to those choosing to breastfeed. However, once education is provided to WIC participants, the ultimate decision to breastfeed remains a matter of individual choice.

If a woman cannot, or does not, breastfeed, WIC provides iron-fortified infant formula in accordance with the recommendations of the American Academy of Pediatrics (AAP). The AAP recognizes, as does USDA, that breastfeeding is the optimal feeding choice for newborns. However, in cases where breastfeeding is not a mother's choice, the AAP recommends iron-fortified infant formula.

The provision of iron-fortified formula in the WIC program is widely credited for the declining prevalence of iron deficiency anemia in the U.S. Any restriction of the distribution of infant formula for the high-risk population served by the WIC program would contradict the preventive nature of the Program, and would not necessarily result in increased breastfeeding. Furthermore, restricting infant formula might well result in the loss of WIC participants and a lost opportunity to provide appropriate nutrition to infants. For example, current high retail formula costs could result in inappropriate infant feeding behaviors, such as increased use of cow's milk among low-income infants, with consequent increases in gastro-intestinal bleeding, iron deficiency anemia, and other related health problems.

WIC FRAUD AND ABUSE

Question. Illinois ran a sting operation in December 1993 which resulted in the indictments and arrest of 22 people and 13 corporations for defrauding WIC by giving coupon holders money instead of food. Wisconsin barred nearly 140 grocers from participating in WIC because they fraudulently manipulate the program.

Do fraud and abuse opportunities exist in the WIC program? What studies have been done to document it? What efforts are underway to combat it?

Answer. While some fraud and abuse, such as voucher trafficking, occurs in the WIC program, we believe that opportunity for such abuse in WIC is reduced, due to the following program design features:

- 1) The WIC food instrument has a limited life. It must be used by the WIC participant and redeemed by the vendor within 60 days of its issuance date.
- 2) The number of stores authorized to participate in the WIC program is limited by each State agency. Business integrity, the adequacy of available WIC stores in a neighborhood and competitive prices charged for WIC foods are some of the criteria that State agencies may use to limit the number of authorized vendors.
- 3) The WIC food package is prescriptive in nature. Therefore, the WIC voucher is relatively specific, allowing the purchase of a limited quantity of nutritious foods that are tailored to an individual's health and nutrition needs.
- 4) Each participant's redeemed WIC food instrument is reconciled to her issuance record.
- 5) A nutritional risk assessment, as well as an income determination, is performed as criteria for WIC eligibility

The Vendor Issues Study, released in 1993, and information reported from each of our WIC State agencies annually in our internal Vendor Activity Monitoring Profile reporting system, provide information on the extent of abuse in the program. Based on compliance buys carried out during the summer of 1991, 22 percent of the authorized vendors participating in WIC would have committed an overcharge violation. However, the amount of the overcharge would have been less than \$1 for the majority of the vendors that overcharged. Of the 22 percent that would have overcharged, 14 percent would have inflated the food instrument by less than \$1, while 4.8 percent would have inflated the food instrument by \$1-2.99, and 1.3 percent would have inflated the food

instrument by \$3 or more. The Vendor Issues Study found the aggregate loss due to vendor overcharging to be approximately \$39.5 million or 1.9 percent of estimated annual vendor redemptions. The emphasis in both of these documents has been on overcharging by vendors. Beginning with fiscal year 1995, State agencies will report other fraud and abuse activities including: trafficking, discounting, substitution, and unauthorized redemptions in addition to overcharging. Fiscal year 1995 data will be available to FCS in the spring of 1996.

State agencies that detect serious abuse disqualify the vendors involved and refer them to the Food Stamp Program (FSP) for collateral disqualification if they are also authorized for the FSP.

Also, FCS has proposed a regulation that will require minimum levels of investigation activities for WIC State agencies, require the use of a high risk detection system, and establish a system of uniform penalties for vendors found to have committed fraud or abuse against the program.

Finally, FCS encourages communication among State agencies to ensure that techniques for curbing fraud and abuse are shared among all program operators. A National conference on vendor management is being sponsored by the National Association of WIC Directors in Austin, Texas, in June 1995. This conference will focus on good vendor management practices including strategies and techniques for controlling vendor fraud and abuse.

WIC BLOODWORK REQUIREMENT

Question. Federal regulations require bloodwork used for WIC to be taken within 60 days of the time of certification. This has resulted in a burden to local agencies and participants as more health care is being provided by private providers and HMOs rather than health departments.

National recognized obstetric and pediatric protocols for hematological tests do not always coincide with WIC's requirements. What is being done by USDA to bring WIC requirements for bloodwork more in line with the medical communities' periodicity schedules?

Answer. FCS is working closely with the medical community, particularly the American Academy of Pediatrics (AAP) and the Center for Disease Control (CDC), regarding their protocols for hematological tests. While CDC has drafted guidelines for the "Prevention and Management of Iron Deficiency"; it has not issued the guidelines in final form. The AAP is also considering changes to its pediatric periodicity schedules. Until such time as the AAP and CDC issue their revised guidelines, FCS is hesitant to propose any changes to WIC bloodwork requirements. It is, however, our intent that

WIC's bloodwork guidelines complement rather than conflict with Nationally recognized obstetric and pediatric protocols for hematological test.

FCS has also been in contact with the Office of Managed Care, Health Care Financing Administration, Department of Health and Human Services (DHHS), to discuss coordination between the WIC program and managed care providers under contract to Medicaid. Because each State sets its own hematological schedules under the Early and Periodic Screening, Diagnostic and Treatment Program, it will be difficult to establish one standard that will be consistent with every State's timetable. FCS has, however, issued guidance to State WIC Directors, as has DHHS to its State Directors, that seeks to ensure the timely provision of medical information from Medicaid managed care providers to WIC programs.

WIC BREASTFEEDING CONSORTIUM

Question. Breast feeding promotion and support is an integral mandate of the WIC program. We now know that there are positive health consequences for infants who are breast fed. The Breast Feeding Consortium has played a significant role in helping states to motivate, staff and encourage the implementation of action plans which have led to increased breast feeding among mothers. The Consortium had planned on doing a public education campaign to promote breast feeding but the Department announced at the last consortium meeting that it was no longer going to engage in this effort. Can you please tell us why the Department decided not to participate in this effort to promote breast feeding?

Answer. The formation of the Breastfeeding Promotion Consortium (BPC) was initiated by USDA in 1990 at the suggestion of the American Academy of Pediatrics. Its purpose is to share information on current activities and exchange ideas on how to collaboratively promote breastfeeding. Over 25 organizations participate, including health professional associations, breastfeeding advocacy groups, and other Federal agencies. USDA has hosted all meetings of the Consortium which have been held on an ongoing basis since the BPC's inception.

At the initial meeting of the Consortium in 1990, members recommended that USDA spearhead a National campaign to promote breastfeeding. The Department agreed to do so, and over the next several years invested considerable effort and expense to lay the groundwork for the campaign. For example, the Department: 1) convened a Technical Consultant Group of experts in breastfeeding promotion, social marketing, and media campaigns for advice; 2) contracted for assistance in addressing the technical aspects of campaign planning and laying the groundwork for fundraising; and 3) conducted an assessment of how the campaign can be tailored to best meet the breastfeeding promotion needs of BPC

participating organizations. As a result, a detailed workplan was developed and presented by USDA to the Consortium for review and comment. The workplan was accompanied by a chart for each member's organization to use to indicate its commitment to undertake various activities of the proposed campaign. The Department emphasized that, while it was committed to serving as a catalyst, it was imperative that the role of each Consortium member organization be established, including that of USDA. It was agreed that members would prioritize tasks and make a firm commitment as to their organization's involvement. It was hoped that a consensus could be reached regarding task priority. Response from BPC members was marginal, and USDA determined that the campaign strategy needed to be reevaluated.

The BPC was informed of this at its April 27, 1995, meeting. As a result, a work group of approximately 12 members was established to determine how and to what extent a campaign could be undertaken. USDA will convene a meeting of the work group on June 12.

COMMODITY SUPPLEMENTAL FOOD PROGRAM

Question. The fiscal year 1996 budget proposes a new provision to require that no less than \$57 million of the \$86 million appropriation requested for the Commodity Supplemental Food Program be made available to provide services to women, infants, and children and to give the Secretary the authority to transfer any of these funds not needed for this purpose to the WIC program.

If the requested language is approved, what assurance would there be that sufficient funds would remain available to maintain and meet elderly participation requirements for assistance through the Commodity Supplemental Food Program? Wouldn't the net result of this proposal be to redirect services from elderly persons to women and children?

Answer. If the requested language and the President's proposed level for fiscal year 1996 were approved, we estimate that sufficient funds would be available to support the current level of elderly participation through the end of the fiscal year. This language ensures that if women choose to leave CSFP for the WIC program, funds will be available in the WIC program to serve them.

The Secretary of Agriculture would be required to transfer to the WIC program, unspent funds designated to be spent on women, infants, and children. This transfer would cover the additional cost to the WIC program of switchovers from CSFP. Resources originally assigned to the elderly would not be redirected to the service of women, infants, and children. It should be noted that

CSFP is not funded to serve the needs of all low-income elderly. The Food Stamp Program is designed to do that.

Question. Why is this language requested when current Commodity Supplemental Food Program regulations require that the demand by women and children be satisfied before elderly persons are enrolled in the program?

Answer. We are committed to retaining the primacy of women, infants and children in the CSFP. To the extent that they apply, current regulations will ensure that they have priority over the elderly. However, the new language is necessary to ensure that, if women, infants and children migrate from CSFP to WIC, funding to meet that moving demand is also transferred.

Question. The requested language would direct that at least 66 percent of the funds requested be used to provide services to women and children, leaving a maximum of 34 percent to be allocated for elderly services. How does this compare to how the fiscal year 1995 appropriation is allocated between services to the elderly and to women and children?

Answer. In the President's 1996 Budget, 54.4 percent of 1995 program funds are allocated to women and children and 45.6 percent to the elderly based on approved caseload levels. However, cost data through February 1995 indicate that resources are actually being divided approximately evenly between the two groups of participants.

For fiscal year 1996, the requested appropriation language would reserve an amount equal to 66 percent of the appropriation for service to women, infants and children. However, the President's Budget does anticipate that current inventory levels can be reduced in fiscal year 1996 to support elderly participation at the projected levels. Thus, it will not be necessary to reduce elderly caseload even though the share of the appropriation available for elderly caseload would be less than the elderly's share of total caseload. Although substantially reducing inventory in order to support participation is obviously a strategy that cannot be employed repeatedly, we believe that a one-time inventory reduction would enable us to sustain elderly participation in fiscal year 1996 at fiscal year 1995 levels.

Question. The language requested would require that "no less than" \$57 million of the funds appropriated for the Commodity Supplemental Food Program be available to support women, infants, and children. Why are you proposing only to establish a floor, giving the Secretary the discretion to allocate a higher proportion of the total appropriation to provide services to women and children and to transfer the balance to the WIC program?

Answer. CSFP was originally authorized to target women, infants and children, and reaching this group remains its primary objective. The \$57 is an estimate of what we believe will be necessary to serve women, infants and children in 1996. This provision is intended to ensure that the \$57 million in program resources targeted to women, infants, and children is used to serve that population, in either CSFP or WIC. As a practical matter, the Secretary would only transfer to the WIC program whatever portion of that amount was not needed to serve women, infants, and children in CSFP. Thus in practice, \$57 million would function as a ceiling rather than a floor.

Question. Wouldn't this proposal reduce the overall Commodity Supplemental Food Program in a number of states which are satisfying the demand for services to women and children and do not anticipate growth in this population and, as a result, have and can continue to serve a higher proportion of elderly under the program? Please explain how state allocations would be affected by this proposal.

Answer. Given the projected cost of maintaining elderly participation, and the \$57 million unconditionally reserved for women, infants, and children, it would not be possible for States to increase their elderly participation beyond fiscal year 1995 levels. Allocation of caseload to States would be conducted as in the past. However, resources supporting caseload originally assigned to women, infants, and children but not needed for that purpose would be transferred to WIC, and would not be subject to conversion for elderly service.

Question. Since funds for the Commodity Supplemental Food Program remain available for two years, why are you proposing to transfer funds not required for services to women and children to be transferred to the WIC program in fiscal year 1996?

Answer. Even though it is a two-year appropriation, the funding is appropriated each year to provide service for an estimated number of women, infants and children and elderly. As the WIC program has expanded over the past few years, some women, infants and children who were participating in CSFP have apparently opted to participate in the WIC program. In response, CSFP operators exercised their option to request conversion of their caseload allocation from women, infants and children to caseload for service to the elderly. This has allowed elderly participation in CSFP to expand greatly over the last several years. There are some women, infants and children participating in CSFP who may prefer to participate in this program instead of switching to the WIC program or they may not be eligible for the WIC program. This language would ensure that CSFP funding is adequate to support women, infants and children while providing that, if CSFP funds exceed the

needs of these highest priority participants, the excess could be shifted to the WIC program.

Question. The fiscal year 1996 requests an increase of \$350 million for the WIC program. Why isn't this funding adequate to meet the needs of participants in the Commodity Supplemental Food Program (CSFP) moving to the WIC program? How many CSFP participants do you estimate will move to the WIC program in fiscal year 1996? How does this compare with estimates for the past five fiscal years?

Answer. The WIC request was developed based on an estimate of the number of eligible women, infants and children who would participate in the program if funds were available. This funding participation estimate explicitly assumes that a portion of the WIC-eligible population will be served by CSFP.

The fiscal year 1996 CSFP request is based on a caseload of 210,000 women, infants and children. There is no way to accurately determine how many participants may move to the WIC program. In fiscal year 1994, women, infant and children participation in CSFP fell from 228,000 in October 1993 to 196,000 in September 1994. While we do not know how much of this reduction was due to expansion of the WIC program, anecdotal evidence suggests that a significant number of persons who would otherwise be served by CSFP are instead participating in WIC.

Prior to fiscal year 1994, participation among women, infant and children was increasing in CSFP. While some individuals may have moved from CSFP to WIC during this period, the overall level of participation in CSFP did not appear to be substantially affected by expansion of the WIC program during fiscal years 1990-1994.

CSFP Projects

Question. Please provide us with a report on each of the Commodity Supplemental Food Program projects being carried out in Detroit, New Orleans, and Des Moines.

Answer. Two of these areas have provided service to the elderly since 1981, when a statutory amendment allowed the Department to conduct elderly pilot projects. Based on a congressional directive, a third site, New Orleans, was added in the following fiscal year. I am submitting for the record data which summarizes the estimated funding levels being provided to the elderly (as well as women, infants and children) at these three sites over the past few years.

[The information follows:]

Fiscal Year 1992			
	WIC	Elderly	Total
Detroit	\$9,415,972	\$5,771,081	\$15,187,053
New Orleans	\$7,313,351	\$6,750,784	\$14,064,135
Des Moines	\$ 415,158	\$ 968,699	\$ 1,383,857
Fiscal Year 1993			
	WIC	Elderly	Total
Detroit	\$10,012,685	\$5,880,465	\$15,893,150
New Orleans	\$ 6,967,280	\$7,856,720	\$14,824,000
Des Moines	\$ 407,340	\$ 906,660	\$ 1,314,000
Fiscal Year 1994			
	WIC	Elderly	Total
Detroit	\$10,409,880	\$6,939,920	\$17,349,800
New Orleans	\$ 7,894,080	\$8,551,920	\$16,446,000
Des Moines	\$ 453,840	\$1,010,160	\$ 1,464,000
Fiscal Year 1995			
	WIC	Elderly	Total
Detroit	\$11,559,169	\$7,326,993	\$18,886,162
New Orleans	\$ 6,632,624	\$9,265,475	\$15,898,099
Des Moines	\$ 399,652	\$ 902,603	\$ 1,302,255

Figures are not official until final reports are submitted.

CSFP CASELOADS

Question. What requests has the Food and Consumer Service received to expand existing Commodity Supplemental Food Program caseloads? What expansion requests are being met in fiscal year 1995? What additional funding would be required in fiscal year 1996 to meet all requests to expand existing caseloads?

Answer. Program regulations require that, for each caseload cycle, CSFP food funds be converted into caseload slots and assigned in accordance with a priority system which first maintains participation levels from the preceding fiscal year, then provides expansion caseload, and finally assigns any remaining caseload to new State agencies. All available resources are exhausted in that manner. In fiscal year 1995, resources were sufficient to maintain previous participation levels, fulfill all requests for expansion caseload for

women, infants, and children, and meet approximately 25 percent of the total demand for elderly expansion caseload. The cost of satisfying all expansion requests in fiscal year 1995 would have required an additional \$5,437,500 (including administrative costs) above the appropriated \$84.5 million.

Since all resources are assigned in the form of caseload at the outset of the caseload cycle, it is not possible to address subsequent requests for expansion caseload during the cycle.

We do not know the level of funding that would be needed to meet 1996 expansion requests because the States are not required to submit such requests until the beginning of the fiscal year.

CHILD NUTRITION PROGRAMS/NATIONAL SCHOOL LUNCH PROGRAM

Question. What efforts are underway to reduce overpayments in the School Lunch Program and to improve the overall management of our food programs?

Answer. There are really two parts to this question: one concerned with program integrity and one having to do with improved administration at all levels. With respect to integrity, over the past few years, the Department has undertaken a number of initiatives to ensure that meals are counted and claimed correctly. In 1989, we published a regulation requiring a system of internal controls in every school food authority to review meal counts and verify their accuracy. That regulation also required States to have a similar system in place to review the consolidated claims submitted to them by their school food authorities. In that same year, FCS began a program of direct Federal reviews of local school operations. These reviews resulted in about \$2.8 million being assessed; reviews in subsequent years assessed claims of over \$2 million per year.

In 1989, Congress enacted legislation establishing a joint Federal-State system of reviews for the school meal programs. Under this Coordinated Review Effort (CRE), States remain principally responsible for conducting reviews of local school food authorities, although FCS assists the States and, in some cases, conducts independent reviews. In school year 1992-93, the first year of CRE activity, \$455,300 in overclaims was assessed. The Department remains concerned about the integrity of the Child Nutrition Program and is continuing to study options for improving payment accuracy.

With regard to "overall management of our food programs," the Food, Nutrition, and Consumer Services (FNCS) has sought to develop, and continues to advance, proposals for program changes that offer greater

flexibility, administrative streamlining, and improved customer service, consistent with USDA's nutrition mission.

We are strongly committed to regulatory changes that emphasize meeting our mission by achieving concrete results, rather than by protecting a bureaucratic process. FNCS strives to encourage full achievement of program goals not through punishment, but through continuous improvement, using consultation and technical assistance. We have worked to expand State flexibility, reduce excessive administrative requirements, and encourage innovation.

Our efforts to reinvent USDA's nutrition programs began with the school meals programs. The School Meals Initiative for Healthy Children, proposed last June, is the first full-scale reform of the program since it was established by President Truman in 1946.

The proposal, which will be finalized this year, updates nutrition standards so that school meals meet the Dietary Guidelines for Americans. Administrative red-tape will be cut. And we are improving the nutrition profile of USDA commodities provided to schools as well as enhancing their availability. This comprehensive, integrated reinvention plan will assure that school children have access to healthy meals that also taste good.

The Initiative was organized around a four-point framework for action developed to continuously improve school meals:

- I. Eating for Health: Meeting the Dietary Guidelines
- II. Making Food Choices: Nutrition Education, Training, and Technical Assistance
- III. Maximizing Resources: Getting the Best Value
- IV. Managing for the Future: Streamlined Administration

The plan focuses on results, rather than processes, by requiring schools to meet nutrition standards. In order to provide schools with flexibility to meet the new nutrition standards, the current meal patterns would be replaced by an on-going nutrient analysis system called Nutrient Standard Menu Planning, or NuMenus. Compliance provisions in the proposal focus on corrective action and technical assistance, rather than on punitive sanctions.

We made maximum value and program effectiveness for each dollar spent, and reductions in administrative burden, integral parts of our reinvention plan. The regulatory proposal, published in June 1994, includes two provisions designed to reduce regulatory burdens and increase administrative flexibility: 1) the Coordinated Review Effort (CRE) review cycle would be extended from four to five years, reducing the number of reviews that schools would face; and 2) the requirement for local

school food authorities to conduct specific types of edit checks on daily meal counts would be eliminated unless the most recent CRE review indicated meal counting and claiming problems. These and other administrative changes would eliminate Federal requirements for over 15 million hours of current recordkeeping burden each year.

We are also implementing paperwork reduction provisions of the 1994 reauthorization legislation. For example, under the new law, children who meet the income eligibility criteria for the Head Start Program are categorically eligible for free meals under the Child Nutrition Programs, thereby eliminating the need for Head Start administrators to make duplicative eligibility determinations.

FNCS is also working to implement statutory alternatives to annual eligibility determinations and daily meal counts by type for schools electing to serve meals free of charge to all children. We fully expect these and other provisions, such as direct certification which uses information provided directly by Food Stamp or Aid for Dependent Children offices in lieu of individual applications, will relieve local administrators of unnecessary paperwork without sacrificing necessary accountability.

The Department also recently presented proposals to reform and reinvent the Food Stamp Program as part of the Administration's guidance for the 1995 Farm Bill. These proposals grow out of a year-long, thorough review of the program -- its successes and shortcomings -- including a wide variety of outreach activities to gather public input. A paper describing our proposals is submitted for the record.

Important program changes are well underway. For example, the Administration has been working closely with States so that by the end of 1996, nearly all States will be working to implement EBT benefit delivery systems. Through EBT, a greater emphasis will be put on State/Federal coordination of programs and benefits. Under the leadership of the Vice President, we are moving rapidly to achieve full implementation of this important new technology.

The package incorporates and builds on the Department's comprehensive 13-point strategy to combat Food Stamp Program fraud. As you know, fraud and abuse are perceived as serious threats to the Program. Our strategy advances our longstanding commitment to eliminate trafficking and other fraud through a three-tiered attack. We seek to improve screening of food retailers entering the program to ensure that only legitimate stores participate; to monitor food retailers so as to identify promptly anyone defrauding the program, and immediately suspend them; and to levy stiffer

penalties for violators, including debarment and forfeiture of property gained through Food Stamp fraud.

Promoting Food Stamp Program integrity is a central part of our responsibility to taxpayers to ensure that Program benefits are used only as intended -- for food. This reform plan has the potential to simultaneously improve program performance, and minimize costs resulting from benefits lost to fraud.

While our legislative plan is pending, our regulatory reform strategy will focus on steps we can take administratively to further our principles with a strong focus on establishing clear outcome and performance expectations for States. By doing this, we can eliminate the cumbersome provisions of current rules which detail exactly how benefits and services will be delivered. FNCS expects to eliminate one-half of the CFR pages dealing with the Food Stamp Program. In sum, the plan could provide a foundation for transforming the 30-year old Food Stamp Program into a National nutrition security program that provides administrative flexibility and meets the nutrition needs of the next century.

Ongoing reform efforts have also included an examination of USDA's commodity distribution programs. FNCS has sought to make changes in program regulations that eliminate redundancy, reduce administrative burden, and improve the program's effectiveness. Many of the most important changes, particularly those involving consolidation of the commodity programs, would require legislative changes.

We have recommended consolidation of two programs -- The Emergency Food Assistance Program (TEFAP) and the Soup Kitchen/Food Bank Program -- in the Administration's 1995 Farm Bill guidance. In the meantime, we are committed to making all appropriate regulatory changes in order to streamline program administration, eliminate waste, and give States and the emergency food assistance network more flexibility to target assistance.

In the WIC program, we are currently pursuing several regulatory actions currently under development designed to improve the integrity of food vendor management, to streamline administrative procedures, to better coordinate local health care services, and to modify and update the WIC administrative funding formula to address changing needs and program priorities.

[The information follows:]

FOOD STAMP PROGRAM REFORM

May 23, 1995

The Food Stamp Program has been the cornerstone of the national commitment to protect the nutrition, health, and well-being of America's low-income families for over 20 years. The program has succeeded in getting food to the people who need nutrition assistance. There is still room, however, for improvement. We need basic, common sense reforms that build on the program's success.

Over the last two years, the U.S. Department of Agriculture reviewed all aspects of the Food Stamp Program, guided by six key reform principles: provide for nutrition security, improve program integrity, modernize benefit delivery, expand State flexibility, ensure economic responsiveness, and promote personal responsibility. The reforms described here will transform the Food Stamp Program into a more flexible program that meets the nutrition needs of families into the next century.

In taking these steps, we preserve the ability of the Food Stamp Program to respond to changing economic conditions. Historically, the Food Stamp Program has automatically expanded to meet increased need when the economy is in recession and contracted when the economy is growing. Food stamp benefits automatically flow to individuals and communities that face rising unemployment or poverty, cushioning the harsher effects of economic recession and stimulating weakening economies. Our reforms recognize that the Food Stamp Program is a necessary safety net to assure low-income American families the assistance they need to obtain a healthy, nutritious diet in tough times.

NUTRITION SECURITY

- This comprehensive reform proposal will fully integrate nutrition education and promotion into the Food Stamp Program to help alleviate hunger and promote good nutrition and health among low-income families. USDA proposes to:
 - Expand the Food Stamp Act's declaration of policy -- the Food Stamp Program's mission statement -- to reflect current knowledge of the significance of a nutritious diet to improved health. This will help ensure that the Program provides both the resources and the awareness, motivation, and information needed for low-income American families to obtain nutritious diets and better health into the future.
 - Incorporate the most current nutrition science into the Food Stamp Program, and use consumer-driven nutrition promotions to improve program participants' diet and health. USDA will lead the development and promotion of coordinated and effective nutrition messages to promote better nutrition. The Department will support collaborative State- and community-based partnerships to promote healthy and affordable food choices among program participants through channels they see, in languages they speak. This comprehensive nutrition program will ensure that millions of low-income program participants have the skills, information, and motivation necessary to support healthy eating.

PROGRAM INTEGRITY

- Increase USDA access to a wide variety of documents to be used to verify the legitimacy of retail food firms. This will strengthen the Food Stamp Program's ability to identify unscrupulous retailers during the retailer authorization process and keep them from defrauding the program. USDA seeks authority to:

- Require retailers to provide income and sales tax filing documents at the time of application.
 - Require participating retailers to provide USDA with written permission to verify all tax filing documents with other agencies.
 - Require participating retailers to authorize USDA to obtain critical corroborating documentation from independent sources such as credit bureaus, collection agencies, wholesalers, and independent firms that rate the good standing and status of businesses or provide other confirmation of business operations and finances.
- Expand authority to use retailer-provided information when cooperating with law enforcement authorities. This will enable the program to confirm information received from participating retailers and obtain information relevant to retailer integrity. USDA seeks authority to share retailer taxpayer identification numbers, such as Social Security numbers (SSN) and Employer Identification numbers (EIN), with State investigative and law enforcement agencies that already maintain files of such information. This will assist USDA in verifying the integrity of retailers and identifying problem stores.
 - Expand authority to screen retailers better during the application process. By identifying unscrupulous retailers before they enter the program, USDA can improve program integrity while minimizing administrative burden and costs. USDA seeks authority to:
 - Require a 6-month waiting period before reapplication by a store that does not initially meet eligibility criteria. This reform will limit participation in the Food Stamp Program of those retailers who temporarily stock a store merely to meet minimum program requirements to engage in food stamp trafficking.
 - Set time limits on store authorizations. For example, USDA would establish provisional authorizations for as short as 6 months for newly opened stores to provide USDA time to confirm their legitimacy.
 - Expand forfeiture authority to allow the seizure of any property used in or derived from illegal food stamp transactions. Enhanced forfeiture authority would be applied against the property of individuals involved in food stamp trafficking of \$5,000 or more, and the property will revert to the government. Expanded forfeiture authority will remove much of the financial incentive for trafficking and serve as a significant deterrent to fraud.
 - Enhance retailer penalties to deter food stamp fraud. Strengthening retailer penalties will increase the costs of trafficking and simultaneously improve the program's ability to end trafficking-related losses promptly. USDA seeks authority to:
 - Immediately suspend stores violating program requirements pending any administrative review of a proposed sanction.
 - Take action against stores based on evidence derived from sources other than on-site investigations, such as transaction reports under Electronic Benefit Transfer systems.
 - Establish specific time periods for the suspension and debarment of stores based on a serious history of lack of business integrity, such as convictions for embezzlement, insurance fraud, or program abuse. Currently, there are no specific time periods and there is no explicit differentiation between major offenses and less serious infractions.

- Provide that a store disqualified for violations of Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) shall be disqualified from the Food Stamp Program for the same duration. Currently, a store that has its food stamp authorization withdrawn as a result of a WIC disqualification can delay implementation of the food stamp penalty through appeals while the clock runs on the WIC penalty, suffer a short penalty, and be reinstated in the Food Stamp Program when the WIC disqualification ends. Stores should serve a complete term of disqualification for both programs, even if it does not run concurrently.
- Permit USDA to permanently disqualify retailers who intentionally submit falsified applications that would lead to a fraudulently obtained authorization. This will deter applications from unqualified stores and assure that, once discovered, such stores would be banned from all future participation in the program.
- Expand the definition of "coupon" to encompass authorization cards, cash or checks issued in lieu of coupons, or access devices (e.g., EBT cards and personal identification numbers).
- Strengthen penalties for recipient fraud. USDA seeks legislation to double penalties for recipient fraud from 6 months to 1 year for the first violation, from 1 year to 2 years for the second, with permanent disqualification for the third violation.
- Replace the current Quality Control System with a new Payment Accuracy System. It is critical to couple efforts to expand State flexibility with a workable, performance-based monitoring system that holds States accountable for payment accuracy. The new Payment Accuracy System will give States a larger stake in making accurate determinations of eligibility and benefits and strike a better balance between rewards and sanctions for performance. USDA seeks authority to:
 - More effectively target sanctions on States with the highest error rates, focusing on those with error rates more than one percentage point above the national average and stiffen the requirements for payment. Other features of the current calculations of State liabilities should be retained.
 - Provide real incentives to States to reduce error rates by improving the current system of enhanced funding. The initial phase (covering performance in fiscal years 1996 and 1997), would reward States that reduce their error rates by allowing them to retain 25 percent of the savings gained when food stamp error rates fall; the subsequent phase (starting with performance in fiscal year 1998) would reward States that maintain low error rates. The total value of incentives paid out could not exceed \$100 million in any one year. These special incentives would be eliminated after five years except for States with error rates below 6 percent.
 - Credit effective State efforts to collect claims for overissuances. This would reduce a State's liability by a portion of the value of claims collected and returned to the Federal government.
 - Hold States harmless for 6 months for errors made during the conversion to a new computer system.
 - Complete all arbitration requests and announce final error rates by June 30 of the following year.
 - Exclude the established and extensively reviewed statistical methodology for calculating error rates as a basis for appeals of State liabilities for high error rates.

- Strengthen the existing penalty system by requiring States to begin payments on their liabilities within 90 days; the Secretary may defer substantial payments for up to 12 months if State legislative action is needed; payments would be made quarterly over 30 months.

This proposal will allow States to reinvest a portion of the savings realized as error rates fall, supporting continued program improvements. It will also stiffen the requirements for payments from States with high error rates. This combination -- rewards for improved payment accuracy and real sanctions for high error rates coupled with investment in program improvement -- will augment existing incentives for States to reduce errors, reducing Federal costs and saving taxpayer dollars.

- Simplify and expand the tools available to States to collect claims for overissuances. USDA seeks authority to:
 - Simplify the claims process by allowing States to use any of the existing collection methods (e.g., allotment reduction, the Federal Tax Refund Offset Program) for any outstanding claim.
 - Require States to participate in mandatory tax and salary offsets against former recipients owing outstanding claims.
 - Allow States to retain a uniform 25 percent of any claim collected for an overpayment caused by a household error (whether unintentional or fraudulent), with the balance returned to the Federal government.
 - Allow States to immediately recoup outstanding claims from participating households. States could waive recoupment of claims made for State agency errors if collection would pose a hardship for the household.

These changes will make it easier and more attractive for States to establish and collect claims for errors caused by States and participants.

- Authorize States to assist law enforcement officers in locating fugitive felons. This would add an exception to the current restrictions on disclosing information provided by applicants.

MODERNIZE BENEFIT DELIVERY

- Accelerate the implementation of Electronic Benefit Transfer systems. This will speed progress towards a national benefit delivery system that works better and costs less. USDA seeks authority to:
 - Share the cost of EBT implementation and operation equally with States, eliminating the requirement for annual, State-by-State cost-neutrality. Implementation of EBT nationwide in the fullest sense -- one card, user friendly, with unified delivery of government-funded benefits -- will save money. The requirement is an unnecessary administrative burden.
 - Remove the prohibition against sharing the cost of acquiring EBT equipment with retailers who share in the benefits of its use.
 - Permit States to determine which stores should receive terminals provided by the government to ensure adequate access for all program participants.
 - Equip authorized drug and alcoholic treatment centers, battered women's shelters, group living arrangements, and homeless meal providers with point-

of-sale (POS) terminals and allow them to deposit through financial institutions as other authorized retailers do.

- Expand the use of modern technology by ensuring the legal sufficiency of States' paperless application systems. This would enable States to continue to improve customer service while streamlining administrative operations.

EXPAND STATE FLEXIBILITY

- Expand State flexibility and authority to design administrative procedures that work for them. USDA seeks authority to:
 - Expand State flexibility to assign certification periods up to 24 months long provided there is a personal contact at least every 12 months. Under current law, normal certification periods are 3 to 12 months long. USDA has authority to approve waivers for longer periods to coincide with the certification periods of Aid to Families with Dependent Children (AFDC) or general assistance programs. This would enable States to certify households for more than 12 months without seeking a waiver from USDA.
 - Expand State authority to determine the most useful and reliable means of verification. This would delete overly prescriptive Federal rules that require specific verification systems (including the income and eligibility verification systems (IEVS) and the immigration status verification system (SAVE)).
 - Eliminate unnecessary requirements that States use only merit system employees for certification and provide continuing training to their employees. This will allow each State to determine the employment policies and training needs that best fit their circumstances.
- Provide administrative relief to States by simplifying the requirements for expedited application processing. Expedited service fills a critical need in ensuring that nutrition benefits quickly reach those who cannot wait for normal processing to run its course. The current requirements, however, can be improved. USDA seeks authority to:
 - Increase the number of days which States have to provide expedited service from 5 to 7. This provides a more reasonable and workable balance between the need to provide benefits quickly and States' ability to do so.
 - Improve the targeting of expedited service by limiting it to those with limited financial resources. This would eliminate the two categories of households most recently added: households consisting entirely of homeless people (almost all of whom also qualify for expedited service on the basis of income and resources) and households whose shelter costs exceed their combined gross income and liquid resources (a group whose financial circumstances are more similar to regularly processed applicants than to other expedited cases).

These changes will relieve some of the administrative pressure on States without adversely affecting those who need expedited service the most.

- Expand State flexibility and authority to develop customer service guidelines appropriate for their clientele. Because basic nutrition needs are the same no matter where one lives, broad, uniform Federal guidelines are appropriate to ensure that the nutrition security safety net is intact across the country. Within these broad guidelines, however, there should be room for States to design customer service standards that meet their needs. Overly prescriptive statutory requirements would be replaced with a broader requirement that States:

- Evaluate and determine the best means to address the access needs of special groups (e.g., the elderly, disabled, rural poor, homeless, residents on reservations, and people who do not speak or read English).
- Provide timely, accurate, and fair service to all customers, including the right to file applications the first time they contact the food stamp office, receive benefits within 30 days if determined eligible, receive advance notice of the expiration of their certification period, and have a fair hearing if they disagree with the State's decisions.
- Provide necessary information to applicants and recipients, including information on their rights and responsibilities.

States could -- and many would -- choose to continue to provide at least the same or comparable services required under current law. To provide the necessary flexibility to States to tailor their services, however, the statute would no longer require States to:

- Use a uniform national food stamp application -- every State now has a Departmental waiver from this requirement
- Include specific information about each household's rights and responsibilities on the application
- Waive in-person office interviews for elderly or disabled applicants and households with transportation or other difficulties
- Permit other households with transportation or other difficulties to provide necessary information over the telephone or through the mails
- Help applicants to obtain verification of the information in their application and complete the application process
- Provide a toll-free, local, or collect telephone number that potential applicants or participants can use to reach the State agency for information or assistance
- Display posters and provide materials in State food stamp and public assistance offices on nutrition and eligibility for other USDA nutrition programs
- Conduct a single interview when households apply for both food stamps and AFDC
- Combine food stamp applications with public assistance (PA) and Statewide general assistance (GA) applications; provide food stamp applications and information at local GA offices if the same agency administers GA and PA
- Provide for mail issuance in rural areas or other areas where low-income households face transportation problems
- Provide a single allotment combining food stamp benefits for two months for expedited service households that apply after the 15th of a month
- Allow households to switch between the standard utility allowance and actual expenses during the certification period.

The following statutory requirement would be made a State option:

- Develop standard estimates for the shelter expenses of homeless households
- Expand States' flexibility and authority to streamline and standardize income and benefit calculations. By allowing States to experiment with ways to improve program conformity, this will improve service to clients and simplify administrative procedures. USDA seeks authority to:
 - Simplify benefit calculations for households with AFDC while ensuring equity and controlling costs. This might be accomplished, for example, by expanding the tolerance (currently set by regulation at \$10) for the amount of benefits a household may lose under a standardized income plan while ensuring that Federal costs do not rise.

This will better enable States to standardize food stamp benefits for that portion of the food stamp caseload also receiving AFDC. States could, for example, simplify food stamp benefit calculations by starting with the calculations made for AFDC, and subtracting a standard deduction, standard shelter, and appropriate earnings disregards. States may elect to apply different shelter standards to households with and without housing subsidies. For this portion of the food stamp caseload, workers would only need to know one set of rules, simplifying application processing, and supporting better service to clients.

USDA is also engaged in a comprehensive review of all Food Stamp Program regulations, with the explicit goal of eliminating overly prescriptive requirements. This regulatory review initiative will complement these proposals. For example, USDA is considering simplifying requirements for reporting changes in circumstances, recertifying households, and providing bilingual services.

PERSONAL RESPONSIBILITY

- Strengthen work requirements for able-bodied adults by streamlining and strengthening sanctions for noncompliance and restricting exemptions. This will reinforce the expectation that all those who can work should. USDA seeks authority to:
 - Allow States to apply sanctions for noncompliance to the noncompliant household member-only (rather than to the entire household).
 - Adopt tougher procedures for curing noncompliance and tougher penalties for repeat offenders.
 - Eliminate the requirement that States offer a conciliation process before taking action to sanction noncompliance with work requirements.
 - Conform FSP sanctions for noncompliance with Employment and Training (E&T), voluntary quit, and workfare to streamline and simplify program administration.
 - Permit States to apply work requirements to more parents by allowing them to restrict the exemption of caretakers based on the age of their youngest child (now set at 6-years). This would allow States to require work of caretakers of children as young as 1-year as long as adequate child care is available. If child care is not available, the current exemption from participation applies.

USDA will also pursue a revised policy to ensure that food stamp benefits do not increase when benefits in other assistance programs are reduced for noncompliance.

- Permit States to require cooperation with the Child Support Enforcement Program. This will reinforce the expectation that both parents have financial responsibility for their children. Forty percent of the food stamp caseload -- those receiving AFDC -- are already subject to this requirement as a condition for receiving AFDC. This would extend the same requirement, at State option, to food stamp recipients who do not receive AFDC.

The State's option to require cooperation with child support enforcement would be limited to those who live with and exercise parental control over children under 18-years old who have noncustodial parents that do not provide appropriate child support. This group would be required to provide appropriate assistance to the Child Support Enforcement Agency to establish paternity and secure and enforce a child support order. As for AFDC recipients, States would be required to provide exceptions for good cause, sanction only the noncompliant parent, and waive any application fee for services rendered.

- Permit States to require non-custodial parents with child support obligations to cooperate with Child Support Enforcement as a condition of food stamp eligibility. This will enable States to ensure that absent parents with the financial ability to pay child support do so.
- Allow States to deduct the charges associated with replacement EBT cards directly from food stamp allotments. Current law permits States to charge recipients for the replacement of the lost card. This would allow States to more readily make food stamp recipients financially responsible for replacing lost EBT cards which, in turn, should enhance their sense of responsibility for the proper care of the cards.

TECHNICAL AMENDMENT

- Request authorization for the capped funding of a modified nutrition assistance program in American Samoa.

CHILD NUTRITION PROGRAMS/CHILD AND ADULT CARE FOOD PROGRAM

Question. In a recent report, GAO found that the Child and Adult Care Feeding Program ineffectively targets low-income individuals. It states that over 40 percent of the current program resources are used to subsidize meals for individuals with incomes over 185 percent of the poverty level. In fact, in fiscal year 1995, it is estimated that approximately \$697 million in meal subsidies will be for individuals with incomes above 185 percent of the poverty levels. In addition, GAO found that the program does not ensure that the value of benefits are directly transferred to low-income individuals in centers because centers are not required to reflect meal reimbursements in rates charged to low income individuals.

Do you agree with these GAO's findings that the Child and Adult Care Feeding Program is ineffectively targeted to low-income individuals?

Answer. The Child and Adult Care Food Program (CACFP) provides meal benefits to two very different types of institutions--child care centers and family day care homes. Meal reimbursements in child care centers are means-tested and well-targeted. Benefits provided to family day care providers in the CACFP should be better targeted, and some form of means testing is needed to target benefits and restrain costs.

Last year, the Administration proposed the Comprehensive Welfare Reform and Family Support Amendments of 1994, which contained a number of reforms designed to make welfare a transitional system leading to work. This legislation proposed a geographic means test for the family day care home portion of the CACFP which would have better targeted benefits to low-income family day care providers and children. We are continuing to consider this and other options for implementing a means test in this portion of the CACFP.

However, we disagree with the General Accounting Office's suggestion to require centers to reflect CACFP reimbursements in the rates charged to low-income children. Such a change would force enormous complexity into a day care rate structure which is simple and appropriate and, more importantly, would represent an unwarranted Federal intrusion since these centers already serve roughly three-quarters of their CACFP meals to low-income children. The increased costs to centers of administering such a provision would force them either to lower the quality of meals served and/or to raise rates charged to parents.

Question. Two alternatives are offered by GAO to the current Child and Adult Care Feeding Program: (1) to change the program to better target low-income

individuals, or (2) to replace the Child and Adult Care Feeding Program with a new grant program to the states to subsidize day care for low-income individuals in approved homes and centers that serve meals meeting minimal nutrition standards. GAO proposes that the Department of Health and Human Services (DHHS) could administer this new grant program, or, at a minimum, the adult care component could be transferred to DHHS' Administration on Aging as a grant program.

What are the Department's views on each of the alternatives proposed by the GAO to the Child and Adult Care Feeding Program?

Answer. The Department believes that benefits in child care centers are well targeted. However, benefits for family day care providers in the CACFP should be better targeted, and that some form of means testing is needed.

However, the Department strongly disagrees with the General Accounting Office's (GAO's) other proposed approaches to the targeting issue -- eliminating benefits for meals served to children from households over 185 percent of poverty in child care centers, and/or requiring centers to reflect meal reimbursements in rates charged for care of children from low-income households. These options are not viable, either by themselves or in combination with a means test.

Requiring centers to reflect CACFP reimbursements in the rates charged to low-income children would force enormous and unnecessary complexity into the centers' rate structure. Furthermore, the modest subsidy for meals served in centers to children over 185 percent of poverty supports meal service to -- and thus benefits -- all children by helping centers keep their rates lower. Without this subsidy, some centers would be forced to raise their rates and/or would drop out of CACFP. Higher rates and decreased access to nutritious meals would work a special hardship on the low-income children in such centers, and would, in many cases, force their parents to seek out cheaper, sub-standard care.

We also disagree with GAO's proposal to convert the CACFP into a grant program and to transfer responsibility for its administration to the Department of Health and Human Services (DHHS). The primary purpose of CACFP is to improve the health and nutritional status of children who are not in school and adults in nonresidential day care. Transferring CACFP resources to DHHS as a block grant would alter the program's focus on nutrition and health. Child nutrition programs should continue to be performance-funded entitlements in order to ensure that their benefits continue to be available to low-income children.

The Department is working closely with the Administration on Aging (AoA) to identify ways to better

administer programs providing nutrition benefits to the elderly. A proposal to transfer the adult day care component of CACFP to AoA may have some merit if it can be integrated into elderly feeding programs that are currently administered by AoA.

THE EMERGENCY FOOD ASSISTANCE PROGRAM

Question. The fiscal year 1996 request of \$40 million for The Emergency Food Assistance Program (TEFAP) would continue funding for state administrative activities and maintain the storage and distribution pipeline for USDA and privately donated commodities, but would discontinue funding (\$25 million for fiscal year 1995) to purchase commodities for distribution.

The testimony indicates that funds are not requested for fiscal year 1996 to purchase TEFAP commodities in part for budgetary reasons, but also in recognition that food stamp benefit levels have been increased. Would you please explain how the increase in food stamp benefit levels reduces the need for TEFAP commodity purchases?

Answer. The Food Stamp Program is the cornerstone of Federal food assistance efforts. It is intended to ensure that all eligible low-income families or individuals have access to an affordable and nutritious diet. Because it is not based upon categorical criteria, it is available Nationwide for households with little income and few resources.

Several changes were recently enacted in the Mickey Leland Childhood Hunger Relief Act of 1993 that improved the ability of the FSP to meet the food needs of low-income households. In turn, food stamp improvements can lead to reduced need for supplementary food assistance programs such as TEFAP, which helps relieve situations of distress and hunger by making available surplus foods for distribution.

Question. How will the Food and Consumer Service work with industry and community groups to promote and encourage increased food donations and referrals to the Food Stamp program?

Answer. In fiscal year 1994, ten small FSP grants totaling \$1.077 million were awarded by FCS. Nine of the grants were awarded to private-sector nonprofit organizations and one grant was awarded to a food stamp office and its nonprofit partner. All ten of the grantees are providing referrals and client enrollment assistance to hard-to-reach persons such as elderly, low-income working poor, homeless, non-English speaking minorities and others.

A key thrust of these demonstration grants has been to encourage and test public-private partnerships between private, client-oriented service agencies and local FSP

offices to improve accessibility of the FSP. Activities to assist clients include making appropriate referrals, providing food stamp applications, helping individuals fill out application forms and conducting the certification interview at sites other than the food stamp office, obtaining verification documents, providing translators, prescreening applications, and other methods.

We are also working closely with the Social Security Administration (SSA), Supplemental Security Income (SSI) and seven of their nonprofit grantees to test combined access approaches to refer and assist elderly and disabled individuals to learn about and make application for food stamp benefits. In fiscal year 1994, we provided SSA with \$450,550.

In fiscal year 1995, fourteen State agencies are receiving optional 50-50 Federal matching funds estimated at \$2.5 million for FSP informational and referral activities. Activities include networking with organizations in the community, assisting clients with food stamp applications, and extending office hours.

With regard to food donations, we believe that our role is to support the TEFAP distribution network through continued provision of administrative funds. Solicitation of food donations from industry and community groups is better handled by the private sector, which has traditionally performed this function. The efforts of the private sector are largely supported through the provision of Federal administrative funds. According to the Second Harvest 1993 National Research Study, on average, commodity contributions from Federal, State and local governments account for only 5.1 percent of food distributed through Second Harvest network programs, many of which participate in TEFAP. In contrast, Federal, State and local government cash contributions accounted for 55.3 percent of the total dollars used for operation of the programs.

Question. What amount and type of bonus commodities are currently being distributed through the program? What amount and type of commodities are being purchased for distribution?

Answer. Although TEFAP was projected to receive 72 million pounds of bonus butter valued at approximately \$59,817,600 during fiscal year 1995, we expect that the decline in Commodity Credit Corporation-owned inventories will cause this figure to be lower.

We are purchasing commodities valued at \$25 million for distribution through TEFAP. Of this amount, approximately 26,797,430 pounds, valued at approximately \$13,256,496, is being purchased in canned pears, peaches, potatoes, tomatoes, pork and green beans. We are also

purchasing approximately \$11.7 million of macaroni, peanut butter, dehydrated potatoes, rice, and spaghetti.

Question. What limitations are place on the use of administrative funds provided to States under TEFAP?

Answer. In accordance with section 204(a)(2) of the Emergency Food Assistance Act of 1983 (Public Law 98-8, as amended), and program regulations at 7 CFR 251.8(d), TEFAP administrative funds may be used for direct costs associated with the distribution of USDA commodities under TEFAP and the Soup Kitchen/Food Bank Program, and other USDA-donated commodities distributed through the TEFAP network.

In addition, TEFAP administrative funds may be used to support the distribution of commodities obtained through private sector donations, which, as indicated in the Second Harvest 1993 National Research Study, constitute the overwhelming majority of the food distributed through the Second Harvest feeding network. Allowable administrative costs for USDA commodities include storage, handling, distribution, repackaging and processing of the commodities. For non-USDA commodities, funds can be used to pay costs associated with storage, handling, and distribution.

FOOD STAMP PROGRAM FOOD STAMP FRAUD

Question. What is food stamp eligibility fraud and trafficking costing the federal government annually? What progress have we made in this area?

Answer. In March 1995, the Department presented its comprehensive 13-point strategy to combat Food Stamp Program fraud. Our strategy advances our longstanding commitment to eliminate trafficking and other fraud through a three-tiered attack. We seek to improve screening of food retailers entering the program to ensure that only legitimate stores participate; to monitor food retailers so as to identify promptly anyone defrauding the program, and immediately suspend them; and to levy stiffer penalties for violators, including debarment and forfeiture of property gained through Food Stamp fraud.

Promoting Food Stamp Program integrity is a central part of our responsibility to taxpayers to ensure that Program benefits are used only as intended -- for food. This reform plan has the potential to simultaneously improve program performance, and minimize costs resulting from benefits lost to fraud. We have made progress on both eligibility fraud and trafficking. In fiscal year 1994, State agencies conducted 668,103 recipient fraud investigations -- twenty-two percent more than the year before. Of these, 115,125 positive pre-certification investigations resulted in a decision to deny the

applicant who would have otherwise been certified, and 128,152 positive post-certification investigations were referred for an administrative hearing or consideration of prosecution. In the same period, 83,522 individuals were disqualified from the program as a result of a finding of an Intentional Program Violation (IPV).

The dollars involved in eligibility fraud remain very difficult to estimate since overissuances can be caused not only by fraud, but also by client or caseworker misunderstanding. While Quality Control reviewers attribute some of the overissuances to possible client fraud, based on their review of a sample of cases, until an investigation is conducted into each case and a hearing or court decision is rendered, there is no definite finding of an IPV. In fiscal year 1994, States established claims for \$35 million for fraud, and established total claims for \$268 million, most of which is for inadvertent household error.

We have made good progress in determining how many Federal dollars are diverted away from food benefits by trafficking. Until recently there were only anecdotal accounts of the extent of trafficking and these differed from one local area to another. There were no reliable data to estimate the **Nationwide** amount of trafficking in the program. Relevant empirical data simply did not exist.

New empirical data on trafficking have become available only in the last few years. The Compliance Branch has shifted priorities to investigations which disclose trafficking. By focusing on developing stronger, more significant trafficking cases, the number of stores found trafficking went up from 841 in fiscal year 1993 to 902 stores in fiscal year 1994. A wealth of recently-collected investigative evidence on trafficking violations now exists. We have combined it with data collected as part of a new study of authorized retailers. The combination of these two databases is likely to enable the FCS to make a preliminary estimate of the prevalence on trafficking and identify where the trafficking problem is most serious.

Question. I understand that the Southeast Regional Office of the Food and Consumer Service has initiated a comprehensive plan designed to reduce food stamp retailer fraud. Would you please update us on the initiatives being undertaken in the Southeast Region. How extensive is the problem of retailer fraud nationwide? Are the other regions taking similar steps to combat this problem?

Answer. The Southeast Region's retailer integrity plan seeks to focus limited resources on priority anti-fraud strategies. The most significant activities in this plan are:

- o Reauthorization initiative to focus on retailers with high redemptions compared to reported sales; pilot project in Fulton County (Atlanta, GA) to target 400 retailers.
- o Review authorization of rolling stores/routes in Atlanta with support from the Office of Inspector General.
- o Host Regional Retailer Integrity Summit to improve coordination among relevant Federal and State agencies.
- o Conduct pre-authorization visits of stores which may not meet the minimum requirements of an authorized retailer.
- o Encourage southeast States to conduct public awareness campaigns which would include client and retailer education efforts.
- o Support EBT activities in South Carolina (expansion from Darlington County) and the Southern Alliance of States.

The FCS National Office has received a plan from each region which includes similar initiatives, as appropriate to the retailer concerns in their States.

In March, the Department presented its comprehensive 13-point strategy to combat Food Stamp Program fraud. Our strategy advances our longstanding commitment to eliminate trafficking and other fraud through a three-tiered attack. We seek to improve screening of food retailers entering the program to ensure that only legitimate stores participate; to monitor food retailers so as to identify promptly anyone defrauding the program, and immediately suspend them; and to levy stiffer penalties for violators, including debarment and forfeiture of property gained through Food Stamp fraud.

Promoting Food Stamp Program integrity is a central part of our responsibility to taxpayers to ensure that Program benefits are used only as intended -- for food. This reform plan has the potential to simultaneously improve program performance, and minimize costs resulting from benefits lost to fraud.

Question. In February of this year, the Secret Service testified before the House Agriculture Committee that current statistics indicate that counterfeiting of food stamp coupons is not a significant problem. Do you agree?

Answer. The U.S. Secret Service shares its information on counterfeiting with the USDA. We agree that the counterfeiting of food coupons is not a significant problem.

When food coupons are redeemed through the Federal Reserve Banks (FRB), they are examined for genuineness. The FRBs submit reports on counterfeiting to USDA, as well as to the Secret Service. In fiscal year 1994, the FRBs reported detecting less than \$10,000 in counterfeit food coupons.

FOOD STAMP PROGRAM ELECTRONIC BENEFITS TRANSFER (EBT)

Question. The testimony indicates that the fiscal year 1996 budget will allow the Food and Consumer Service to move aggressively toward implementation of Electronic Benefits Transfer (EBT) systems for food stamp benefits where cost effective. Would you please update us on the status of State implementation of EBT systems. How many states currently have a system and how many do you expect to be on EBT by the end of the year?

Answer. There are eight States with operational on-line food stamp EBT systems: **Pennsylvania** - Reading; **Maryland** (Statewide); **Minnesota** - Ramsey [St. Paul] and Hennepin [Minneapolis] Counties; **New Mexico** (expanding Statewide); **Iowa** - Linn County [Cedar Rapids]; **New Jersey** - Camden, Essex [Newark], and Hudson [Jersey City] Counties; **Texas** - expanding Statewide; **South Carolina** - expanding Statewide. There are two States with an operational off-line food stamp EBT system: **Ohio** [Dayton] and **Wyoming** [Natrona County]. Two of the States with operating EBT systems -- **Pennsylvania** and **Ohio** -- have released Requests for Proposals to expand their systems Statewide.

Three States, **Utah** and **North Dakota/South Dakota** (as a joint project), have already selected EBT vendors and may be operating EBT pilots by the end of 1995.

Illinois, the **District of Columbia**, and **Oklahoma** and **Louisiana** (along with New Mexico as the Southwest Consortium) have released Requests for Proposals to operate EBT systems. The Southern Alliance of States (SAS) is eight States participating in a joint procurement venture with the Federal government: **Alabama**, **Arkansas**, **Florida**, **Georgia**, **Kentucky**, **Missouri**, **North Carolina**, and **Tennessee**. Approximately twenty other States have some EBT planning activity underway, for a total of about 43.

Question. Why might EBT not be cost effective for some states?

Answer. States with low issuance costs find it difficult to support EBT as a feasible alternative within the constraints of Federal and State cost neutrality requirements. These States have delivered paper coupons most cost efficiently and, therefore, have trouble justifying EBT as a cost effective alternative for them. Rural States that lack an existing Point of Sale (POS)/ATM

infrastructure also contend that EBT would be too expensive for them to pursue before there is further commercial development in this arena.

We are hopeful, however, that, as the cost of EBT comes down and as EBT costs are increasingly shared with other stakeholders, EBT will become a cost-effective alternative for these States. Furthermore, we have not found any State (to date) that has begun a serious examination of EBT that decided to abandon its efforts because of prohibitive costs.

Question. For several years, the Department has conducted Electronic Benefits Transfer (EBT) pilot projects to assess the feasibility and economy of eliminating paper Food Stamp coupons. As you know, the Administration has advocated, and the Congress has considered, overhauling the federal welfare system. Among the programs under consideration in this reform effort is the Food Stamp Program.

Can you please explain why you have proceeded with the procurement of equipment for a nationwide Electronic Benefits Transfer (EBT) system before Congress acts on welfare reform legislation?

Answer. The use of EBT to issue food stamp benefits is a choice State agencies currently have under the Food Stamp Act. States are not required to implement EBT. While we have promoted EBT as a more secure and cost-effective alternative to paper coupons, we have sought to implement guidelines for EBT planning and implementation that will be flexible enough to adapt to future changes in the law.

States have used the same reasoning in developing EBT systems. In planning, many States have examined welfare reform proposals and found that EBT is adaptable to the various possible reforms now being discussed. Several States have chosen to pursue EBT systems while keeping in mind that welfare reform may alter the current program requirements. These States have concluded that, although changes will occur, EBT will be their preferred delivery method.

FOOD STAMP EMPLOYMENT AND TRAINING PROGRAM

Question. How many individuals does the Food Stamp employment and training program serve on an annual basis and how many Food Stamp recipients secure a job as a result of this assistance? What is the cost per job of the program?

Answer. Participation in the Food Stamp Employment and Training (E&T) Program was 1.36 million for fiscal year 1994. The Department does not collect information on the number of individuals placed in jobs as a result of the

E&T Program. For fiscal year 1994, the cost for placing an individual into an E&T Program component was \$86 per person.

Question. A recent GAO report indicates that the Food Stamp Employment and Training program is one of nine federal programs with overlapping goals that specifically target the disadvantaged. It proposes that the services provided by this program could be provided by other existing employment and job training programs, such as the Department of Labor's Job Training Partnership Act. Do you agree that the Food Stamp Employment and Training Program is not effective and could be terminated in light of other federal existing employment and job training programs?

Answer. The only evaluation of the Food Stamp Employment and Training Program (E&T) was performed during fiscal year 1988. It concluded that at that time, in the sites studied, the program had no impact on employment and earnings. A small savings was accrued through the sanction process for noncompliant individuals and because the program was a deterrent to participation.

It is our belief that a work requirement for able-bodied food stamp recipients should remain in place. Such a requirement does not necessarily have to be attached to the Food Stamp Program or the offices that administer the Program.

The Department recognizes that the services of E&T overlap those offered by other Federal programs and is not adverse to consolidating it with one or several of those programs. The Vice President's National Performance Review recommended that the Program be transferred to the Department of Labor for administrative expediency.

The E&T program is one of a number of Federal employment programs that would be included in the President's Education, Training and Reemployment Initiative. The initiative would consolidate existing programs and place their resources into the workers' hands to learn and apply new skills.

NUTRITION INITIATIVES

Question. You have talked about the Team Nutrition project. Can you explain in detail how much money is going into this campaign, how it is progressing, and how you plan to engage private sector support?

Answer. As directed by Congress, FCS is using the \$20,350,000 to support schools' efforts to improve the nutritional content of school meals through Team Nutrition, a two-tiered approach to build skills and motivate children to make healthy food choices in schools, and ensure that school food service personnel

have the education, motivation, training, and skills necessary to provide healthy meals that appeal to the children served.

Team Nutrition includes a National children's nutrition education initiative, a multi-faceted program delivered through the media, in schools, at home, and in the community to encourage children to make healthy food choices. The campaign brings proven, focused, science-based nutrition messages to children in a language that they understand, while strengthening social support for children's healthy food choices among parents, educators, and food service professionals.

A detailed breakout outlining the fiscal year 1995 budget for technical assistance and training, and for children's nutrition education, is submitted for the record.

FCS's strategy is predicated on a high level of private-sector involvement.

Team Nutrition is a ground breaking effort to link USDA and many of those who touch children's lives. Extensive strategic public-private partnerships with a variety of associations, health and nutrition advocates and educators, the media and industry leaders and government agencies, extend the Team Nutrition Initiative's reach and amplify the messages, thereby leveraging the investments of USDA and its Team Nutrition partners. With support from around the country, for the nutrition education and training and technical assistance, Team Nutrition will improve the nutritional health of our children.

The theme of Team Nutrition's children's education component is "making food choices for a healthful diet," and the strategy for disseminating and promoting this theme is based fundamentally on public-private partnerships. One example of such a partnership is the Department's agreement with the Walt Disney Company. Disney has donated the use of Pumbaa and Timon, two characters from its blockbuster movie "The Lion King," to help deliver healthy eating messages. USDA is working with Disney to disseminate these health messages through a wide variety of exciting educational and entertainment materials -- "interstitial" television messages, home video releases, posters, and in-school displays, among others -- to help children learn healthy eating habits using channels they see, in a language they speak, and in lively and entertaining ways.

USDA has also entered into a partnership with Scholastic, Inc., to prepare teacher's kits, to get effective nutrition information to children in school and to their parents at home. These kits will be tailored to specific age groups (pre-school, first and second grade, third through fifth grade, and sixth grade and up), and

will include nutrition curricula, children's magazines, posters, and videos. Scholastic will work with Team Nutrition to develop messages and design materials. After the kits are prepared, they will use their own resources to market them directly to schools.

Future educational partnerships will link sponsoring organizations to USDA to produce nutrition-oriented video and computer games, music videos, and other "cutting-edge" communications strategies.

In addition to Team Nutrition's children's educational effort, it is designing and implementing a training and technical assistance plan to help schools serve healthy meals that also taste good. Team Nutrition will work closely with a variety of public and private partners -- chefs, food producers, universities, cooperative extension (including EFNEP -- Expanded Food and Nutrition Education Program), professional organizations, and others -- to develop and distribute training materials, including recipes, menus, manuals, and other assistance materials. USDA will fund 26 State agencies to develop or enhance Statewide training systems. To leverage Federal resources, much of Team Nutrition's training will be delivered using a "train the trainer" model, whereby USDA and partners will train State trainers, who in turn provide training and assistance to local school food authorities in their States. Finally, Team Nutrition is working in close partnership with the American School Food Service Association (ASFSA), which represents school food service personnel Nationwide. By seeking input from ASFSA and State agencies on the kinds of training materials and other assistance that would be most useful in helping schools meet new nutrition standards, we can ensure that the resources committed to this effort by USDA and others are used as effectively as possible.

In order to make resources more accessible, USDA will offer a "Healthy Meals Resource System" which can be accessed via print, or on-line services.

[The information follows:]

I. FOOD SERVICE TRAINING & TECHNICAL ASSISTANCE

Develop and disseminate training materials to assist school food service personnel in having knowledge and skills necessary to implement the Dietary Guidelines.

A. Technical Assistance Materials

Development, Design, Printing and Dissemination of:

- National Training Standards
- NSLP and SBP Healthy Recipes
- Recipe Promotion and Training Package

- School Lunch Menu Planning Guide/CD Rom
- Child Care Menu Planning Guide
- Child Care Recipe File
- Purchasing Manual (Printing)
- Assisted NuMenus: Menu Cycles and Preparation Techniques
- Nutrition Standard Training Materials: (Revision and Printing of Curriculum for 3 systems to implement Dietary Guidelines for 3 levels of food service staff)

Subtotal: \$ 2,160,000

B. Health and Taste Initiatives

- Education and Promotional Events
 - Healthy Foods Promotional Video
 - Resource Packet (Includes production and distribution of video and print to 23,000 SFAs)
- School Lunch Challenge II
 - Healthy Recipes Development
- Development of Healthy Food Preparation Videotapes

Subtotal: \$ 475,000

C. Print & Electronic Food Service Resource System

- Collecting and Cataloguing of Materials, and Development of a User-Friendly Software System, Maintenance, and Nationwide Dissemination of the System
- Nutrition Standard Database Development and Maintenance
- Nutrition Standard Software Testing and Approval for Nutrient Standard Menu Planning
- Nutrition Standard Help Hotline (to be housed at the NFSMI¹)

Subtotal: \$1,240,000

D. NFSMI Cooperative Agreement for Food Service

- Purchasing Manual/Product Specs
- Healthy Cuisine Workshops for Food Service Personnel
- **Healthy Meals Help Hotline**

Subtotal: \$ 225,000

¹ National Food Service Management Institute

II. CHILDREN'S EDUCATION RESOURCES

Provide nutrition education based upon the Dietary Guidelines to support improved school meals by integrating nutrition education resource materials into the classroom, the cafeteria, and the community.

A. In-school Education Materials

Development, Design, Printing and Dissemination of:

- Classroom kits for pre-kindergarten through 12th grade to provide teachers with nutrition activities to integrate throughout their curriculum.

Each kit will include at a minimum:

- Teacher's Guide
- Curriculum Resource Materials
- Student Magazines
- Class Poster
- Parent Take Home Piece
- School Food Service activities

Pre-K and Kindergarten Kit

Grades 1 and 2 Kit

Grades 3-5 Kit

Grades 6-12 Kit

- Supplementary school-based activities, including resource materials, school food service promotions for cafeteria staff, educators and students, in-cafeteria promotions and incentive programs for healthful eating linked to the children's communications program.

Teachers

Students

In-cafeteria/school food service

Subtotal:

\$ 2,700,000

B. Community Education Materials

Development, design, printing and dissemination of community educational materials specifically addressing **special needs of communities, especially ethnic diversity and literacy levels.**

- Community resource/training kit
- Parent's Guide Materials
- Healthy Kids Activity Materials
- Community partner program materials
- In-store and in-office materials
- Tailored ethnic materials
(e.g., African American, Hispanic,
Native American, Asian American)
- Low-literacy parent's materials

Subtotal: \$ 2,250,000

III. FOOD SERVICE TRAINING GRANTS TO STATES

These competitive grants will enable 20-25 State agencies to establish and enhance a Statewide training system to assist local agencies in implementation of the Dietary Guidelines.

Grants to 20-25 States @ \$50,000-\$200,000 each.

\$ 4,450,000

IV. USDA/FCS DIRECT TRAINING & EDUCATION

A. Summer Institutes for Food Service Personnel

\$ 150,000

B. Delivery of Regional Food Service Training Programs for State agency personnel (train the trainers) in 7 Regions

\$ 1,000,000

C. Regional Nutrition Education Program

- Design, print and disseminate education technical assistance materials for use by FCS regions in supporting State activities.
- Establish distribution of education materials to States and locals through a 1-800 order service, warehouse.
- Provide training and technical assistance to State and local leadership to develop and implement Team Nutrition programs.
- Develop and produce periodic video-conferences to update State and local cooperators on Team Nutrition activities.

Subtotal: \$ 800,000

V. CHILDREN'S COMMUNICATIONS & TECHNOLOGY

Provide cost-efficient support for the in-school and community through mass media nutrition education messages. Develop, produce and disseminate for each group below messages through cooperative agreements with children's media experts. Mass media messages will use famous children's icons to deliver nutrition messages.

- Design and produce broadcast messages and collateral materials featuring characters from "The Lion King" to reach pre-K-5th grade.
- Develop, produce and disseminate additional television treatments to reach 6-12th grade students.
- Design, produce, and disseminate video programming and other broadcast treatments to support Team Nutrition educational messages to parents and community partners.
- Design, produce, and disseminate video instruction for satellite and distance learning applications.
- Design and produce materials for access through the information highway, e.g., FedWorld, World Wide Web.
- Design and produce interactive computer applications to educate children about making healthy choices.
- Design, produce and disseminate radio programming for students and parents.
- Design, write and produce feature articles and background materials communicating Team Nutrition education messages for use in magazines, newspapers, television and radio programming.

Subtotal: \$ 2,800,000

VI. TEAM NUTRITION PARTNERSHIP SUPPORT

A. Resources for Team Nutrition Schools

Printing and Dissemination of Resource Materials, including communication/network activities.

\$ 350,000

B. Partnership Network Support

- Support partner activities, participation in partner conferences

- exhibits, fairs, etc.
- Design, print and disseminate, on a regular basis, materials to inform current and potential partners about Team Nutrition activities and opportunities for their involvement.
- Design and produce education materials to support joint activities conducted with other Federal agencies to reach consumers through reinforcing channels, such as clinics, health departments and departments of Education.
- Provide miscellaneous technical support to partners.

Subtotal: \$ 750,000

VII. EVALUATION

A. Formative

Test message concepts and pre-finished executions with target audience members --e.g., children pre-K through 12th grade, parents, educators, school food service--to ensure they communicate effectively.

Subtotal: \$ 250,000

B. Process

Track implementation of education tactics and assess need for refinement of materials and dissemination strategies.

Subtotal: \$ 150,000

C. Outcome

Conduct national baseline study; conduct first phase of two-community tracking study.

Subtotal \$ 600,000

TOTAL \$ 20,350,000

Question. A total of \$20.4 million, an increase of \$18.1 million above the previous fiscal year level, was provided for fiscal year 1995 for the school meals initiative for healthy children. What amount of funding is being allocated for education and training grants to the States and for what purposes have these grants been provided?

Answer. Nearly half of the \$10.1 million budgeted for training and technical assistance has been set aside for Team Nutrition Training Grants, a program of competitive

funding to assist States in developing a sustainable infrastructure of training programs that help local school districts to implement updated nutrition standards. A request for applications has been published in the Federal Register; up to twenty-five such grants, totaling \$4.45 million, are scheduled to be funded this year.

The Agency is currently reviewing grant proposals and hopes to make the announcement of the grant recipients in June 1995.

Question. Please give us specific details, including an object class breakdown, of how the \$20.4 million provided for the school meals initiative for healthy children for fiscal year 1995 is being spent.

Answer. A detailed budget explaining fiscal year 1995 estimated expenditures of \$20.4 million is submitted for the record.

[The information follows:]

I. FOOD SERVICE TRAINING & TECHNICAL ASSISTANCE

Develop and disseminate training materials to assist school food service personnel in having knowledge and skills necessary to implement the Dietary Guidelines.

A. Technical Assistance Materials

Development, Design, Printing and Dissemination of:

- National Training Standards
- NSLP and SBP Healthy Recipes
- Recipe Promotion and Training Package
- School Lunch Menu Planning Guide/CD Rom
- Child Care Menu Planning Guide
- Child Care Recipe File
- Purchasing Manual (Printing)
- Assisted NuMenus: Menu Cycles and Preparation Techniques
- Nutrition Standard Training Materials: (Revision and Printing of Curriculum for 3 systems to implement Dietary Guidelines for 3 levels of food service staff)

Subtotal:

\$ 2,160,000

B. Health and Taste Initiatives

- Education and Promotional Events
 - Healthy Foods Promotional Video

- Resource Packet (Includes production and distribution of video and print to 23,000 SFAs)
- School Lunch Challenge II
- - Healthy Recipes Development
- Development of Healthy Food Preparation Videotapes

Subtotal: \$ 475,000

C. Print & Electronic Food Service Resource System

- Collecting and Cataloguing of Materials, and Development of a User-Friendly Software System, Maintenance, and Nationwide Dissemination of the System
- Nutrition Standard Database Development and Maintenance
- Nutrition Standard Software Testing and Approval for Nutrient Standard Menu Planning
- Nutrition Standard Help Hotline (to be housed at the NFSMI¹)

Subtotal: \$1,240,000

D. NFSMI Cooperative Agreement for Food Service

- Purchasing Manual/Product Specs
- Healthy Cuisine Workshops for Food Service Personnel
- Healthy Meals Help Hotline

Subtotal: \$ 225,000

II. **CHILDREN'S EDUCATION RESOURCES**

Provide nutrition education based upon the Dietary Guidelines to support improved school meals by integrating nutrition education resource materials into the classroom, the cafeteria, and the community.

A. In-school Education Materials

Development, Design, Printing and Dissemination of:

- Classroom kits for pre-kindergarten through 12th grade to provide teachers with nutrition activities to integrate throughout their curriculum.

¹ National Food Service Management Institute

Each kit will include at a minimum:

- Teacher's Guide
- Curriculum Resource Materials
- Student Magazines
- Class Poster
- Parent Take Home Piece
- School Food Service activities

Pre-K and Kindergarten Kit
 Grades 1 and 2 Kit
 Grades 3-5 Kit
 Grades 6-12 Kit

- Supplementary school-based activities, including resource materials, school food service promotions for cafeteria staff, educators and students, in-cafeteria promotions and incentive programs for healthful eating linked to the children's communications program.

Teachers
 Students
 In-cafeteria/school food service

Subtotal: \$ 2,700,000

B. Community Education Materials

Development, design, printing and dissemination of community educational materials specifically addressing **special needs of communities, especially ethnic diversity and literacy levels.**

- Community resource/training kit
- Parent's Guide Materials
- Healthy Kids Activity Materials
- Community partner program materials
- In-store and in-office materials
- Tailored ethnic materials
 (e.g., African American, Hispanic, Native American, Asian American)
- Low-literacy parent's materials

Subtotal: \$ 2,250,000

III. FOOD SERVICE TRAINING GRANTS TO STATES

These competitive grants will enable 20-25 State agencies to establish and enhance a Statewide training system to assist local agencies in

implementation of the Dietary Guidelines.
Grants to 20-25 States @ \$50,000-\$200,000 each.

\$ 4,450,000

IV. USDA/FCS DIRECT TRAINING & EDUCATION

A. Summer Institutes for Food Service Personnel

\$ 150,000

B. Delivery of Regional Food Service Training Programs for State agency personnel (train the trainers) in 7 Regions

\$ 1,000,000

C. Regional Nutrition Education Program

- Design, print and disseminate education technical assistance materials for use by FCS regions in supporting State activities.
- Establish distribution of education materials to States and locals through a 1-800 order service, warehouse.
- Provide training and technical assistance to State and local leadership to develop and implement Team Nutrition programs.
- Develop and produce periodic video-conferences to update State and local cooperators on Team Nutrition activities.

Subtotal: \$ 800,000

V. CHILDREN'S COMMUNICATIONS & TECHNOLOGY

Provide cost-efficient support for the in-school and community through mass media nutrition education messages. Develop, produce and disseminate for each group below messages through cooperative agreements with children's media experts. Mass media messages will use famous children's icons to deliver nutrition messages.

- Design and produce broadcast messages and collateral materials featuring characters from "The Lion King" to reach pre-K-5th grade.
- Develop, produce and disseminate additional television treatments to reach 6-12th grade students.
- Design, produce, and disseminate video programming and other broadcast

treatments to support Team Nutrition educational messages to parents and community partners.

- Design, produce, and disseminate video instruction for satellite and distance learning applications.
- Design and produce materials for access through the information highway, e.g., FedWorld, World Wide Web.
- Design and produce interactive computer applications to educate children about making healthy choices.
- Design, produce and disseminate radio programming for students and parents.
- Design, write and produce feature articles and background materials communicating Team Nutrition education messages for use in magazines, newspapers, television and radio programming.

Subtotal: \$ 2,800,000

VI. TEAM NUTRITION PARTNERSHIP SUPPORT

A. Resources for Team Nutrition Schools

Printing and Dissemination of Resource Materials, including communication/network activities.

\$ 350,000

B. Partnership Network Support

- Support partner activities, participation in partner conferences exhibits, fairs, etc.
- Design, print and disseminate, on a regular basis, materials to inform current and potential partners about Team Nutrition activities and opportunities for their involvement.
- Design and produce education materials to support joint activities conducted with other Federal agencies to reach consumers through reinforcing channels, such as clinics, health departments and departments of Education.
- Provide miscellaneous technical support to partners.

Subtotal: \$ 750,000

VII. EVALUATION

A. Formative

Test message concepts and pre-finished executions with target audience members --e.g., children pre-K through 12th grade, parents, educators, school food service--to ensure they communicate effectively.

Subtotal: \$ 250,000

B. Process

Track implementation of education tactics and assess need for refinement of materials and dissemination strategies.

Subtotal \$ 150,000

C. Outcome

Conduct national baseline study; conduct first phase of two-community tracking study.

Subtotal \$ 600,000

TOTAL \$ 20,350,000

Object Classification

21.0 Travel and Transportation of	
Persons.....	36,000
25.2 Other Services.....	15,864,000
41.0 Grants, Subsidies, and Contributions..	<u>4,450,000</u>

Total.....20,350,000

Question. First-time funding of \$500,000 was provided for fiscal year 1995 for grants to meet the dietary needs of children with disabilities. A total of \$1 million was authorized in last year's child nutrition reauthorization bill for this new program. Could you please tell us how the \$500,000 is being allocated? The fiscal year 1996 budget proposes to eliminate funding for these grants. Why?

Answer. The funds provided for grants to meet the dietary needs of children with disabilities have not yet been awarded. We have received proposals for those grant funds which we are in the process of evaluating. We plan to announce grant awards in June 1995.

The President's budget does not request funding for these grants in fiscal year 1996 because of the need to control discretionary spending and because there are other sources of funding, including Child Nutrition

Program meal reimbursement, available to meet the needs envisioned under these grants.

Question. The budget indicates that the increased funding requested for nutrition initiatives of the Food and Consumer Service for fiscal year 1996 will support a nutrition initiative designed to help Americans understand the importance of and how to follow the Dietary Guidelines for all Americans. I note that we have made major headway in this area already through efforts such as nutrition requirements. What types of activities do you plan to carry out with the additional funds requested?

Answer. Despite consumer awareness of the link between diet and health, most Americans have not yet adopted healthy eating habits. In some ways, the public is backsliding in its quest for a healthier diet. To improve health for the future, Americans need to develop lifestyle skills that enable them to make food choices for a healthful diet.

Currently, however, USDA's nutrition education functions are fragmented, and lack the necessary coordination to be fully effective. Furthermore, we know that simply providing consumers with nutrition information may not lead directly to behavior change. Yet, the latest research shows that well-designed nutrition and health communication programs work. If consumers receive creative and compelling messages in a language they understand, real health gains can be made.

The Center for Nutrition Policy and Promotion has been established to coordinate nutrition education and policy across the Department, and to strengthen the link between scientific research and the consumer. The Center will use the proposed funding to incorporate the 1995 revision of the Dietary Guidelines for Americans into a comprehensive nutrition promotion program for all consumers, including USDA food assistance participants. Funding will support a variety of activities including the consumer and evaluation research necessary for developing and coordinating cost-effective nutrition promotions. A small portion may be used to explore the feasibility of a toll-free hotline to provide nutrition information to all consumers with nutritional questions.

Question. Please provide for the record a detailed breakdown of how the additional \$5.2 million requested for fiscal year 1996 for the school meals initiative will be utilized.

Answer. The proposed funding for fiscal year 1996 will enable FCS to continue and expand upon Team Nutrition's accomplishments in 1995. Training and technical assistance for school food service personnel will continue to be a top priority.

Our efforts will focus in areas such as:

- Training State agency staff on Nutrient Standard Menu Planning, Assisted Nutrient Standard Menu Planning, and the Food-Based Menu Planning System;
- Developing technical assistance materials requested by States, including maintenance and updating of the National Nutrient Data Base;
- Continuing to develop and disseminate training packages designed to help schools implement the Dietary Guidelines; and
- Awarding additional Team Nutrition Training Grants, to help States in building a sustainable infrastructure to provide training and technical assistance in support of the updated nutrition standards.

Funding will also be used to expand the reach, and fulfill the goals, of the National Children's Nutrition Education Campaign. In fiscal year 1996, the scope of the campaign's targeted effort will be expanded beyond the elementary school to include the needs of older students (grades 6-12). FCS will continue to use science-based nutrition messages to encourage children to make healthy choices through channels they see, in a language they speak. In the future, we hope to expand the variety of these channels, including video and computer games and music videos, and to explore new technologies to find other "cutting-edge" communications strategies. In implementing the campaign, FCS will continue to use public-private partnerships to leverage Federal resources, and multiply impact.

In fiscal year 1996, FCS will conduct research to evaluate our success in working towards the goals of the School Meals Initiative for Healthy Children, by measuring the progress that schools make in providing meals that meet the updated nutrition standards.

Question. Have additional fiscal year 1995 funds been allocated from line-item budgets towards nutrition education? If so, to what extent?

Answer. FCS provides nutrition education through a number of different programs, but no additional funds have been allocated for nutrition education for the School Meals Initiative for Healthy Children from other line item accounts. A table indicating fiscal year 1995 spending on nutrition education of \$235 million in FCS is submitted for the record.

The largest amount, over \$150 million is spent on required nutrition education for WIC participants; another \$24 million is required to be spent on

breastfeeding promotion for WIC clients.

Over \$20 million will be spent on the School Meals Initiative for Healthy Children this year, to provide technical assistance, training and nutrition education to help schools to serve healthful and nutritious meals, and children make healthy food choices. The Food Service Management Institute receives \$2 million, much of which is spent on nutrition education. The Nutrition Education and Training Program will spend \$10 million in grants to States this year.

FSP will spend over \$8 million for nutrition education both in a program that matches State investments in nutrition education with Federal funds, and in grants that seek new ways to reach FSP participants with nutrition education.

The Food Distribution Program on Indian Reservations will also spend \$1 million on nutrition aides to provide education to native Americans.

In addition, parts of each of the research accounts address demonstrating and evaluating the effectiveness of nutrition education or innovations in providing nutrition education.

[The information follows:]

FY 1995 Spending on Nutrition Education
by the Food and Consumer Service

Program	FY 1995 Spending on Nutrition Education
WIC (Nutrition Education and Breastfeeding Promotion)	\$176 million
Food Stamp Program (matching program and innovation grants)	\$ 16 million
Child Nutrition Programs (Nutrition Education and Training Program, Support for School Meals Initiative, and Food Service Management Institute)	\$ 33 million
Food Distribution Program on Indian Reservations	\$ 1 million
Research Accounts (Child Nutrition, WIC and Food Stamp Programs)	\$ 9 million
Total	\$235 million

Question. Please provide a summary of the nutrition studies and research being funded by the Food and Consumer Service in each of fiscal years 1994 and 1995. Please identify the purpose and cost of each.

Answer. I will include for the record an updated list of all ongoing nutrition studies and research being funded by the FCS in fiscal years 1994 and 1995, including a description of each, its cost, and completion date.

[The information follows:]

Ongoing Food Stamp Program Studies

The National Survey of Food Stamp Recipients and Eligibles

In response to the National Performance Review's call for customer surveys, this study is conducting the first nationally, representative survey of Food Stamp Program recipients. Data will be collected to understand recipients' needs and views on customers service, food security and access to stores, and benefit structure. A two-stage, cluster random probability sample will be chosen to include 2,400 food stamp households. Data collection protocols will be developed and pre-tested. A telephone screener interview will be followed by an in-person interview with a qualified respondent. A descriptive analysis of survey data will be performed. Econometric modeling will be used to quantify relationships between food security, dietary adequacy, and access to stores.

Cost: \$1,973,125

Estimated Completion Date: January 1997

Small Grants for Analytic Research on Hunger and Poverty

This program provides grants for scholarly research on hunger issues in the context of poverty research. Great diversity of methodology has characterized previous Small Grant projects from sophisticated modeling and estimation studies from existing data, application of novel statistical methods, and reviews of theoretical and technical literature to nontechnical investigative and descriptive studies of currently important topics. The purpose is to foster a wide range of independent scholarly thinking on basic program and research issues facing the Food Stamp and other food-assistance programs. The grants are being made in collaboration with the Department of Health and Human Services (DHHS) and the Institute for Research on Poverty (IRP) at the University of Wisconsin in order to encourage a new focus on food assistance programs and hunger issues in the context of poverty research.

Cost: \$195,000

Estimated Completion Date: September 1995

Research Conference on Effective Nutrition Education

The conference will focus on how to evaluate the effectiveness of nutrition communication and education programs especially as they relate to our food programs. The conference, by establishing a dialogue among traditional evaluators, market researchers and experts at evaluation of health promotion efforts, will enable FCS to identify new tools to measure/ document performance which are not dependent on the costly traditional ones. Conference participants will synthesize the state-of-the-art in delivering effective nutrition education to low-income or otherwise disadvantaged populations and, the state-of-the-art in nutrition education evaluation methodologies.

Cost: \$130,000

Estimated Completion Date: July 1995

Authorized Food Retailer Characteristics Study

A representative sample of FCS authorized retailers was surveyed to collect information on store characteristics (e.g. quality and prices of food stamp eligible merchandise, store layout and use of electronic equipment, practices for redeeming coupons). Community interviews collected information regarding recipients' access in five intensive areas. Existing data from the 1990 Census and FCS' retailer data bases are being analyzed and measures of geographic access computed. The study will provide information which will support the development of a model that can be used to determine the adequacy of recipient access to retailers and make decisions on new retailer applications. The collected information will also be used to support an analysis of EBT readiness among authorized retailers and potential changes in food stamp coupon management practices. An additional task statistically analyzes data collected during compliance investigations to update the Agency's violation-prone-profile (VPP). These activities will provide a new statistical targeting method for compliance investigations.

Cost: \$1,274,973

Estimated Completion Date: September 1995

Evaluation of the Application of Regulation E to EBT Systems

The purpose of this study is to assess the outcomes associated with the actual implementation of Regulation E in five different demonstrations sites. Study results will include estimates of Regulation E costs under different scenarios, measures of client satisfaction and a comparative description of operational procedures and

lessons learned. Findings will be used to inform the required extension of Regulation E to EBT systems by 1997.

Cost: \$1,169,102

Estimated Completion Date: November 1996

Evaluation of Food Retailer Demonstrations in EBT-ready States

This study evaluates the South Carolina and New Mexico EBT retailer management demonstrations. As EBT usage expands with National implementation, and if the demonstrations are successful, there will be increased interest in possible alternatives and refinements to current retailer management activities. An increased role for State retailer management and successful State Law Enforcement Bureau (SLEB) initiatives will play important roles. Therefore, the study will inventory and assess SLEB Agreements through fiscal year 1994. As part of the inventory of States with SLEB Agreements, up to six initiatives will receive on-site assessments to provide FCS with a more comprehensive understanding of these activities. The final report will integrate the findings from these assessments within the context of South Carolina and New Mexico National EBT implementation.

Cost: \$409,056

Estimated Completion Date: March 1996

Recipient Food Stamp Trafficking

Food stamp trafficking is a major concern to Congress and FCS which has identified it as a serious violation of program integrity. More information is needed on the dynamics of the exchange behavior of trafficking in order to develop preventative strategies that could lead to increased program integrity. This project explores recipient motives using both focus group and survey methods to develop strategies that can reduce the payoff associated with using food stamp benefits (whether in coupon or EBT form) as an alternative currency. The final product will be a synthesis report which will present an intensive review and assessment of the dynamics of recipient food stamp trafficking.

Cost: \$613,707

Estimated Completion Date: October 1996

Effective State Management of Food Stamp Recipients Claims

This study has three major objectives: (1) to estimate a dollar threshold for the establishment of food stamp recipient claims; (2) to evaluate the cost-effectiveness of the \$35 over-issuance rule for the initiation of a collection action on an established non-fraud claim; and

(3) to identify effective and cost-efficient alternative follow-up activities (collection tools) on claims for which recoupment is not an option. Claims from over issuance for active cases due to State Agency Error and for any delinquent inactive cases are included. The study will allow FCS to assess legislative proposals related to the claims collection process; specifically the development of dollar thresholds for establishment of claims and the evaluation of the \$35 over issuance rule for the initiation of a collection action. This study also provides information and technical assistance to the State agencies on how to improve their collection strategies.

Cost: \$354,851

Estimated Completion Date: November 1995

Evaluation of the Ohio Expanded Food Stamp Off-line EBT Demonstration

Evaluation of feasibility and cost impacts of the recently approved expansion of the food stamp off-line (smart card) EBT demonstration in Ohio. The objective is to evaluate the demonstration of an off-line EBT system in Ohio by testing the technical feasibility of operating the off-line system on a large scale, and by assessing the economies of scale associated with the operation of the system to determine administrative cost impacts. Data collection and analysis will be done over the course of the next several years while the State of Ohio expands its off-line EBT pilot demonstration project State-wide.

Cost: \$694,546

Estimated Completion Date: September 1999

Demonstration and Evaluation of Resource Tests for Licensed Vehicles

The 1991 Technical Amendments to the Farm Bill directed USDA to demonstrate exempting one vehicle per household from countable assets. There is some concern that some low-income households are being denied food stamp benefits solely because they own vehicles with too high a fair market or equity value, even though these vehicles are used for essential transportation between home, work, shopping, and medical services. This study funds both the demonstration activities and an independent evaluation of the demonstration. The research design will rely primarily on analysis of household data collected in each demonstration site, and other analyses to examine changes in the number of eligible households, to calculate participation rates, and to estimate length of stay on the Program. The specific methodologies to be used have not yet been decided upon.

Cost: \$287,726

Estimated Completion Date: October 1997

Demonstration and Evaluation of Resource Accumulation for Food Stamp Recipients

The Mickey Leland Childhood Hunger Relief Act allows households already receiving food stamp benefits to accumulate up to \$10,000 in resources and remain eligible for program participation. The study will describe and compare procedures for implementing the Leland assets accumulation provision. One or more sites will be competitively selected to implement the Leland assets accumulation provision within a local project area. The legislation limits the opportunity to a maximum of 11,000 households. Within each demonstration site, households will be randomly assigned to treatment and control conditions. Data will be collected on household savings, program participation patterns, and Food Stamp Program costs during the four year demonstration period.

Cost: \$987,681

Estimated Completion Date: May 1999

Demonstration of an On-line WIC/FSP EBT System

This demonstration seeks to design EBT approaches for WIC that will be compatible with on-line FSP initiatives for EBT. A Cooperative Agreement was awarded to design an RFP or Statement of Work by October 1995. Efforts are being coordinated between FCS Northeast Regional Office and the States of Maine, New Hampshire, and Vermont with the Maine WIC Director providing coordination and New Hampshire functioning as lead State for the agreement. The objective is to describe, compare and contrast the existing or future functional requirements of the Food Stamp and WIC programs by assessing the technical feasibility of a combined FSP/WIC EBT system in an on-line, off-line or hybrid system; by estimating the development and operational costs; and by describing the advantages and disadvantages of each.

Cost: \$199,416

Estimated Completion Date: October 1995

Farm Bill Outreach Grants II

Grants for outreach to hard-to-reach eligible populations. The objectives are to encourage local service groups to develop and demonstrate methods of improving food stamp participation among underserved, targeted population groups--e.g., elderly, rural, working poor, non-English speakers, recent immigrants; and by means of such projects, to better identify and explain the nature of the problems, including Food Stamp office functions, that hinder FSP participation for such persons. An independent evaluation is being conducted to determine success in reducing barriers to participation, increases in program participation, administrative effectiveness, program efficiency, and the adequacy of administrative resources.

Cost: \$1,420,582

Estimated Completion Date: September 1996

FCS Support to SSI Outreach Demonstration Grants

Collaboration with the Social Security Administration for grants with a "combined program access" feature. Such projects develop hands-on client assistance with food stamp applications. The objective is to collaborate on improving the access of eligible aged, blind, and disabled people to the SSI and Food Stamp programs, through joint demonstration projects aimed at improving the respective outreach and enrollment procedures for the two programs. FCS funds have supported the expansion of six of these grant projects to include a "combined program access" feature. The projects will answer the question of whether it is effective to combine outreach and client assistance across the two programs.

Cost: \$450,550

Estimated Completion Date: December 1996

Parents' Fair Share Demonstration

A National study to determine the impact of providing employment and training services and peer group support to unemployed, noncustodial parents of children receiving AFDC. FCS is joining with AFDC to learn about effective employment and training programs for noncustodial parents since the Food Stamp Program is one of the few for which they are eligible. An experimental design will be used and noncustodial parents will be assigned to Parents' Fair Share treatment groups and control groups in each site. Data collection will include a survey of custodial parents, focus groups with noncustodial parents, ethnographic research and record reviews of AFDC, Food Stamp Program, unemployment insurance earnings, child support, and Job Training Partnership Act Program data.

Cost: \$1,000,000 (FCS) - \$9,000,000 (FCS, DOL, DHHS & Foundations)

Estimated Completion Date: July 1998

Survey of Program Dynamics

FCS uses data from the Census Bureau's Survey of Income and Program Participation to analyze the dynamics of food assistance program participation in relation to changes in income, marital status, labor patterns and other demographic variables. This supports the Bureau's proposed extension of the 1993 SIPP Panel with the particular goal of including data on food security and nutrition. The study will provide panel data showing dynamic changes in program participation for welfare, health, education, and employment/training programs for 1993-2002; and changes in employment, income and poverty, family structure and process, and children's well-being and outcomes. The study will assess welfare reform,

health care reform, and education, employment and training programs. The causes and consequences of program participation will also be analyzed.

Cost: \$300,000

Estimated Completion Date: September 1995

Microsimulation and Related Analyses

This contract provides support for estimating effects of potential program changes, for short-turnaround analyses of current issues, for periodic analysis of FSP participation and household characteristics, and for research needed to improve future analytic capacities. Impact analyses done under the contract support many FCS legislative and budgetary proposals every year. Other organizations, such as CBO, advocacy groups and private research firms, rely on the regular publication of analytical and descriptive studies produced under this contract to support their own analyses of the FSP.

Cost: \$3,306,603

Estimated Completion Date: November 1996

Barriers to Good Nutrition

The purpose of this project is to identify possible barriers to good nutrition in order to develop educational intervention strategies based on research findings. The study analyzed existing data on food expenditure, food and nutrient consumption, and attitudes and knowledge regarding food of low-income households or individuals in those households. Focus groups were conducted to research the attitudes, beliefs, and perceptions of Food Stamp Program participants as they relate to shopping behavior, food preferences and choices, eating patterns, and cooking behavior. The study will recommend nutrition intervention strategies for the identified barriers.

Cost: \$475,000

Estimated Completion Date: July 1995

Conference on Access to Food

FCS is interested in learning more about and testing strategies for improving access to nutritious, affordable food in underserved urban and rural communities. The first step in this initiative will be a conference. It will bring together business owners, residents, practitioners, researchers and government officials to present and discuss successful strategies for developing full-line food stores and alternatives such as farmers' markets and transportation options. FCS views access to food as an integral part of economic and community development. Food store development can result in job creation, residents sharing ownership of businesses

through community development corporations and inflows of revenue to communities. Empowerment Zone/Enterprise Community designees and nonselected applicants will be invited to the conference since many are likely to face barriers to access. The conference can provide information that will assist in the continued development in their strategic plans. An interagency approach has been used in developing the conference and has involved other agencies within the U.S. Department of Agriculture and the Departments of Housing and Urban Development, Health and Human Services.

Cost: \$100,000

Estimated Completion Date: December 1995

State Experiments in Welfare Reform

This project will provide a description and analysis of the process of awarding and implementing State welfare reform experiments involving the Food Stamp and Aid to Families with Dependent Children Program. The focus is on waiver-based demonstrations initiated by States during the Reagan, Bush and Clinton administrations.

Cost: \$200,000

Estimated Completion Date: December 1995

Evaluation of Expedited Service in the Food Stamp Program

The purpose of the study is to obtain current information on the population entitled to expedited service and the characteristics of the service they receive and to assess the effects of legislative changes that broadened the target group for expedited service. In addition, this study will examine specific concerns expressed by State agency and local welfare officials that aspects of current expedited service policy are administratively burdensome, inequitable, and susceptible to Program errors and client abuse.

Cost: \$1,453,573

Estimated Completion Date: August 1995

Evaluation of the E&T/Jobs/JTPA Demonstrations

The evaluation contractor will provide technical assistance to State agencies on an as-needed basis. This assistance will include areas such as research design, specification of data needs, plans for data collection and analysis, and interpretation of findings. It will not include any direct data collection or analysis. The assistance will be accomplished through site visits, reviews of evaluation plans and response to direct requests by the States.

Cost: \$375,836

Estimated Completion Date: July 1997

Error Reduction Initiative

The objective of this initiative is to demonstrate and evaluate whether newly-introduced error reduction initiatives reduce payment error rates in a couple of urban, high-error-rate sites. The error reduction demonstrations will also provide information on the interventions for applying them in other similar urban high-error-areas.

Cost: Maryland \$188,687; Illinois \$184,985;
Evaluation \$79,215
Estimated Completion Date: December 1995

Panel Study of Income Dynamics

To provide support for the continuation of food stamp data collection questions in the 1992-1996 Panel Study of Income Dynamics (PSID). This longitudinal database has been used to examine the dynamics of food stamp receipt.

Cost: \$140,000
Estimated Completion Date: June 1997

Welfare Program Coordination Study

The objective of the study is to provide FCS with assistance in its efforts to improve conformity of the Food Stamp Program with other programs serving food stamp recipients. The first area of interest is investigating eligibility and certification requirements among the Food Stamp Program and other welfare programs.

Cost: \$537,760
Estimated Completion Date: October 1995

State Automation Systems Study: Food Stamp Program

The objective of the study is to assess the current degree and developmental position of State data processing systems; to evaluate the Federal APD approval process, and make recommendations for improvements in the process. The study will also develop guidelines for FCS to use in proposing standards for State systems, and for approval of State applications for Federal funding.

Cost: \$1,354,763
Estimated Completion Date: June 1995

Ongoing Child Nutrition Studies: School Programs

Paperwork Reduction Pilot Projects

The Child Nutrition and WIC Reauthorization Act of 1989 (P.L. 101-147) required the Secretary to conduct three pilot programs seeking to simplify and reduce paperwork burden in the NSLP. This study focuses on two areas: the requirement to take annual applications to determine

one's eligibility category and the requirement to take lunch counts by category. The three pilots are as follows:

- new alternatives to taking daily lunch counts and annual applications for free and reduced price meals;
- an alternative to Provision 1 requirements; and,
- an alternative to Provision 2 requirements.

This project uses a pretest-posttest case study design in 12 pilot sites. FCS would like to test ways to improve application and counting processes associated with an accountable program while imposing the least burden possible on the school district and school food service workers. An interim report was released in March 1994.

Cost: \$700,000

Estimated Completion Date: Fall 1995

State Administrative Costs Study: School Programs

This study describes the State costs incurred to administer the school nutrition programs. Of particular interest is the changes in responsibility of the State agencies in administering the National School Lunch and School Breakfast Programs since 1980 and the associated costs. This study was recommended in the 1990 Farm Bill.

Cost: \$170,000

Estimated Completion Date: Fall 1995

Special Nutrition Analysis and Modeling

This contract provides quick response capability for the Child Nutrition Programs in answering questions posed by legislators or policy makers. This contract is used for many purposes, including responding to reauthorization questions and providing cost estimates. Research presently focuses on characteristics of program eligibles; characteristics of program participants and institutions that administer programs; and the effect of child care expansion legislation. The analyses use existing data available from national studies, demonstrations or special projects.

Cost: \$929,000

Estimated Completion Date: Fall 1996

Early Childhood and Child Care Study

This study examines the nutrient content of Child and Adult Care Food Program (CACFP) meals offered to children and the contribution of CACFP meals to children's meal specific and usual dietary intake. In addition, the study examines factors that affect the child care

provider's ability to meet the Dietary Guidelines. One option will produce prototype instructional materials for child care providers who prepare CACFP meals. Another option will produce data analyses that may be needed to develop new meal patterns for the child care component of CACFP.

Cost: \$2,893,000

Estimated Completion Date: Spring 1996

Nutrient Standard Menu Planning Demonstration Evaluation

A nutrient standard menu planning (NSMP) system is a method of planning NSLP meals in order to meet a nutrient standard rather than meal pattern requirements. A nutrient standard method of planning meals can be viewed as a preferred method for the future if programs are to accept new food products yet maintain nutritional integrity and be responsive to possibly changing dietary goals. Such a system was pilot tested by FCS in school years 1983-84 and 1984-85. That study concluded that while NSMP provides benefits, a larger more carefully designed study would be necessary to obtain an accurate estimate of the costs and benefits necessary to implement NSMP throughout the program.

Cost: \$950,000

Estimated Completion Date: Spring 1997

Community Nutrition Education Cooperative Agreements

The goals of the community-based nutrition education cooperative agreements are to: 1) support the design, implementation and evaluation of nutrition education programs that reach large numbers of food assistance program recipients; 2) foster the development of community networks to better integrate nutrition education service and resources; and, 3) provide integrated nutrition education outside of traditional program-centered delivery systems.

Each project has developed a consortium within their community, specified memorandum of understandings with their partners, and formed advisory councils that include program participants. They have also hired an outside evaluator that will guide the required process and outcome evaluation. All projects have also contributed additional resources --real and in-kind contributions-- at the level of at least 70 percent of their Federal request.

A technical assistance contractor provides direct support to the 10 community projects on community partnership development and their project evaluation. The contractor will also produce a synthesis report on the projects and the lessons learned from this initiative.

Cost: \$1,500,000 --CN, WIC & FS, R&E--
 Estimated Completion Date: December 1996

Nutrition Education and Training Activities Inventory

The Nutrition Education and Training (NET) Activities Inventory will provide a National description of the NET program. This national description will include information about nutrition education needs, met and unmet, that States have identified. In addition, a survey of all State NET coordinators will be conducted to supplement the information gained from the NET State plans.

Cost: \$137,000
 Estimated Completion Date: Spring 1997

National School Lunch Program School Dropout Study

P.L. 101-624 required the Secretary of Agriculture to examine the reasons why schools withdraw from the National School Lunch Program (NSLP) together with an analysis of the impact these withdrawals have on the children. The study will also examine the characteristics of schools withdrawing from the NSLP and the types of food services available to children once the schools withdraws from the program.

Cost: \$361,000
 Estimated Completion Date: Spring 1995

School Health and Nutrition Monitoring Initiative

The Food and Consumer Service and the Center for Disease Control (CDC) have joint responsibility for testing the feasibility of a school nutrition monitoring system as prescribed in the 10-year Plan for Nutrition Monitoring. The plan addresses numerous areas including nutrition knowledge, dietary intake, and anthropometry. Initial funding would be used for a pretest of instruments in three or four sites. FCS and CDC will share the responsibility for funding, planning, and analysis of the pretest.

Cost: \$100,000
 Estimated Completion Date: Winter 1996

Child Nutrition Studies in Process of Award

Implementation of Nutrition Objectives: School Programs

This project will determine the progress that school food authorities have made in implementing Dietary Guidelines in the National School Lunch Program (NSLP) and School Breakfast Program (SBP).

Cost: not yet awarded
 Estimated Completion Date: not yet awarded

Geomapping

This study will investigate the feasibility of using geomapping as a method of examining the delivery of FCSs' food assistance program benefits to children in rural areas. Locations of the relevant food assistance programs will be mapped and matched with census data on poverty, transportation, and other relevant variables in order to determine program access.

Cost: not yet awarded

Estimated Completion Date: not yet awarded

Direct Certification

This study will determine the number of students certified for free and reduced price meals in NSLP/SBP using the direct certification process, the methods used, and the barriers encountered.

Cost: not yet awarded

Estimated Completion Date: not yet awarded

School Food Purchase Study

This study will provide national estimates of the types, amounts and costs of foods purchased by school food authorities participating in NSLP/SBP.

Cost: not yet awarded

Estimated Completion Date: not yet awarded

Nutrition Knowledge of Children

This project will develop and test nutrition knowledge questions appropriate for children; these questions will be used to conduct a National survey.

Cost: not yet awarded

Estimated Completion Date: not yet awarded

Ongoing Special Supplemental Nutrition Programs for Women, Infants and Children (WIC) Program Studies

WIC Modeling and Analytic Projects II (MAP II)

The policy objective of MAP is to analyze existing data to answer policy relevant research questions on topics including: nutritional and medical risk analyses; institutional characteristics and practice of WIC agencies; participant characteristics and dynamics of participation; and, comparative analyses of WIC participants and nonparticipant.

The MAP project uses data from various sources including: WIC Program and Participant Characteristics 1992; the 1988 National Maternal and Infant Health

Survey; the National Health and Nutrition Survey; the National Health and Nutrition Survey (1988-1990); and, the Current Population Survey. MAP includes an Ad Hoc component for responding to analytic needs that arise during the course of the contract.

Cost: \$1,200,000

Estimated Completion Date: Summer 1997

WIC Eligibility Update (1990 Census)

This study updates State and County specific estimates of individuals eligible for the WIC program using 1990 Decennial Census data. This update is mandated by Public Law 101-147 to be conducted in coordination with the Secretary of Commerce. The study will also analyze health and nutrition survey data from the National Maternal and Infant Health Survey and the National Health and Nutrition Examination Survey (NHANES) to assess the prevalence of nutritional risks among the WIC income-eligible population. Methods for producing annual updates at the National and State levels and projecting estimates will be explored.

Cost: \$516,240

Estimated Completion Date: Spring 1996

WIC Nutrition Education Assessment

This project investigates the relationship of WIC nutrition education and participants' nutrition related knowledge, attitudes, behavior and satisfaction with services. The study employs a case study approach and collects data through focus groups, service inventories, and participant interviews in six sites. The study collects baseline and follow-up data on pregnant women who are being certified to receive WIC benefits.

Cost: \$1,785,000

Estimated Completion Date: Fall 1996

Study of WIC Participant and Program Characteristics 1994

Public Laws 99-500 and 99-591 enacted in 1986 require that FCS submit to Congress a biennial report on WIC participant and program characteristics. To meet this requirement, FCS developed a prototype system which routinely collects WIC program information directly from WIC State agencies beginning in 1992. This effort collects information using the prototype for the 1994 report.

Cost: \$1,126,203

Estimated Completion Date: Fall 1995

WIC EBT Demonstration Evaluation

This project studies the first WIC/FSP integrated EBT system in Wyoming. Data collection focuses on feasibility, start-up and early operations costs, and stakeholder impact issues. Analyses include an assessment of the technical and cost feasibility of integrated WIC/FSP systems in larger environments. This project is partially funded with FSP research funds.

Cost: \$1,022,445

Estimated Completion Date: Summer 1996

WIC Model Application Form

The Secretary of Health and Human Services, in consultation with the Secretary of Agriculture, is required to develop, publish, and disseminate a model application form for use by a pregnant woman or child under the age of six for numerous maternal and child assistance programs, such as Medicaid, Head Start and WIC. An interagency agreement is being used to evaluate whether, and to what extent, States adopt and modify the model application form to suit their individual State and local program requirements and needs. In addition, the evaluation assesses the usefulness of the model form for program access and coordination of services. Lastly, clients may be surveyed regarding their perceptions of this simplified approach to multi-program eligibility determination.

Cost: \$100,000

Estimated Completion Date: Winter 1996

WIC Services Integration Study

The purpose of this study is to provide information on the integration and coordination of agencies serving low income pregnant women and to identify possible factors that inhibit or facilitate integration of services. The study will describe the formal and informal integration practices of organizations such as shared applications and referrals and also compares service networks across communities.

Cost: \$921,106

Estimated Completion Date: Winter 1997

WIC Infant Feeding Practices Study

This study addresses the lack of information about infant feeding practices among WIC participants. It includes the circumstances and influences that shape maternal intentions regarding feeding practices during the first year of life. Information is collected before delivery and on a monthly basis for 12 months after birth. Information includes types of food consumed, patterns of feeding, food and formula handling practices,

measures of infant health, allergy development, mother's health promotion behaviors, sources of information about infant feeding, and the social situation. The study addresses issues such as changes in feeding patterns over time, factors that influence feeding patterns, and relationships between feeding patterns.

Cost: \$886,594

Estimated Completion Date: Winter 1996

Standardized Nutrition Risk Criteria

FCS requested the National Academy of Sciences -- through the Institute of Medicine's Food and Nutrition Board to form a committee to examine the scientific base underlying the nutritional risk criteria currently used in the WIC program. The committee will review scientific literature for all nutritional risk factors currently used in the Program and formulate recommendations for determining who is at risk with respect to each criterion, including numerical values. The project will include two public meetings.

Cost: \$750,000

Estimated Completion Date: Winter 1996

WIC Nutrition Education Demonstration Study

Nutrition education is one of the basic services provided to WIC participants. The demonstration study will test the effectiveness of three innovative WIC nutrition education programs. The innovations are touch screen videos, group facilitation processes and Kids Club.

The demonstration study address costs as well as effectiveness. The goal is to identify more effective and less costly techniques of providing nutrition education. The study focuses on nutrition education for pregnant women and children.

Cost: \$1,563,488

Estimated Completion Date: Winter 1997

WIC Food Purchasing Study

WIC participants receive vouchers or food instruments prescribing specific types and quantities of foods. While FCS collects data on the aggregate dollar value of food instruments that are redeemed, it does not have access to data on the types of foods which have been redeemed. This study will determine which foods are prescribed, which are redeemed, and in what quantities, and which are not. UPC scanner code data obtained at check-out from food retailers will be used to examine recipient food purchasing patterns. If there is a consistent pattern in foods that are unredeemed, the program may want to change the prescription in favor of

other foods that contain the necessary nutrients. Further, knowledge of food purchasing patterns will help the WIC program to improve program management and cost containment efforts.

Cost: \$649,488

Estimated Completion Date: Spring 1996

WIC/Head Start Coordination Study

The WIC/Head Start Coordination Study has the following objectives: to develop a description of the overlap in required standards for WIC and Head Start particularly in the areas of eligibility determination and nutrition education; to identify potential barriers to coordination between WIC and Head Start; to identify current innovative examples of WIC and Head Start at the local level; and, to prepare a technical assistance manual for use by WIC and Head Start local agency staff.

Cost: \$275,096

Estimated Completion Date: Fall 1996

Special Supplemental Nutrition Programs for Women, Infants and Children (WIC) Program Studies in Process of Award

Adolescent WIC Participants

Local health services may not always reach the population intended, especially if there is a subpopulation that requires special attention. A subpopulation such as pregnant teens or adolescent mothers may have special needs that are different than the main population of clients. If public health providers and policy makers are aware of specific needs that low-income pregnant teens and adolescent mothers have, services may be more effective in reaching this group. The Adolescent WIC Participants project will identify needs of adolescent WIC participants and describe the participation and childbearing patterns of WIC adolescents.

Cost: Not yet awarded

Estimated Completion Date: Not yet awarded

Iron Deficiency Study

This study will examine the reasons why high rates of iron deficiency anemia continue to exist among low-income preschool children. These reasons might include inadequate diet and high lead intakes. Using the Center for Disease Control's (CDC) surveillance system, a number of communities with high rates of iron deficiency anemia will be identified. In collaboration with CDC, the study will explore reasons for the high rates in this communities.

Cost: Not yet awarded

Estimated Completion Date: Not yet awarded

WIC and Emerging Technology

This study will examine the potential for using new technologies such as computer, telecommunications or electronic benefit transfer systems in the WIC program.

Cost: Not yet awarded

Estimated Completion Date: Not yet awarded

Question. What work will be undertaken with the \$4.162 million requested for fiscal year 1996 for nutrition research and studies? Why is an increase of \$500,000 proposed?

Answer. The Agency is currently in the process of developing the research plan for fiscal year 1996. Requests for proposals (RFPs) have not yet been developed. In general, these research funds are used to conduct evaluations, demonstration projects, and Nationally representative studies which provide information for policy decisions and improved program operations. Our plans include studies to assess implementation of the Dietary Guidelines in the school meal programs, and to develop nutrition education programs.

In addition, the Agency is fully committed to implementing the requirements of the Government Performance and Results Act. Research funds will be used to develop outcome measures and to implement studies that will use these measures to assess program performance. The need to do a more systematic assessment of program outcomes, coupled with the increased annual costs to conduct research to support the implementation of the Dietary Guidelines for Americans in the school meal programs, has resulted in a 12 percent increase in the amount requested for nutrition research and studies in fiscal year 1996.

FOOD STAMP PROGRAM

Question. What is the status of current funding requirements for the Food Stamp program? Will the \$2.5 billion reserve fund be required?

Answer. The fiscal year 1995 appropriation will be sufficient for program needs. Based on participation data through April 1995, we do not anticipate that any of the \$2.5 billion reserve will be needed.

Question. For fiscal year 1996, the budget requests not only a \$2.5 billion reserve fund but a first quarter advance appropriation for the Food Stamp Program in fiscal year. Why is an advance appropriation required?

Answer. The advance appropriation of funds for fiscal year 1997 would enable program operations to continue and ensure efficient and uninterrupted delivery of food stamp benefits in the event that an appropriations bill is not signed into law at the beginning of the fiscal year.

Question. The fiscal year 1995 Appropriations Act prohibits the Department from approving more than 25 food stamp cash-out projects, including all ongoing projects, and limits the total participation in such projects to a maximum of three percent of the estimated national household level participating in the Food Stamp Program.

How many food stamp cash-out projects have been approved by the Department? What is the total participation in these projects as a percent of the estimated national household level participating in the Food Stamp Program? Please provide for the record a brief description of each ongoing or approved food stamp cash-out project, including the State involved, the number of participants in each project, and the anticipated length of the project.

Answer. To date, the Department has approved 21 cash-out projects Nationwide. Some of the approved projects have only recently been implemented and others have not yet begun operation. In January 1995, about 142,000 households (1.3% of the National total) received cash. We anticipate that this number will rise to around 170,000 as some of the recently approved projects roll out.

Submitted for the record is a chart which briefly describes each cash-out project by State, references the number of participants in each project, and the anticipated length of the project.

[The information follows:]

Food Stamp Cash-Out Activity
As of May 16, 1995

1352

Approved: 21	Number of Food Stamp Cases	Length of Demo (in years)	Summary
California San Diego Cash-Out	69,140	6	A "pure" cash-out demonstration, i.e., cash-out is the only change being tested. Scheduled to end October 1995.
Colorado Personal Responsibility and Employment Program	4,500	5	Food stamps are cashed out and consolidated with AFDC and child care benefits. Demo features time-limited benefits for employable adult AFDC recipients who are not employed (30 hours per week) or actively participating in JOBS two years after entering JOBS under the demo. Operating in 5 counties.
Expedited Service Cash-Out: Vermont and Minnesota	VT - 460 MN - 1,089	VT - 4 MN - 5	Because of the nature of their expedited issuance systems, Vermont and Minnesota cannot issue coupons for the first month of certification on the same day eligible expedited households apply. Instead they provide benefits in the form of cash for the initial month of emergency assistance. Operating Statewide in both States.
Minnesota Family Investment Plan	6,000	5	Consolidates AFDC, General Assistance, and food stamps to form a single program with one set of rules and one cash payment. Operating in 7 counties.
Mississippi Work First Program	5,200	3	Provides limited duration on-the-job training positions--up to 40 hours a week--with private and public sector employers. Instead of receiving a monthly welfare check and/or food stamp allotment, participants will receive a regular pay check for the hours they work. Earnings will be based on at least the Federal wage. Funds used to issue public assistance and food stamps will be used to reimburse employers. Will operate in 6 counties.

<i>Approved: 21</i>	<i>Number of Food Stamp Cases</i>	<i>Length of Demo (in years)</i>	<i>Summary</i>
Missouri 21st Century Communities Demonstration	3,000	12	Food stamp benefits are cashed out and consolidated with AFDC to form a wage pool for supplemented jobs for public assistance cases. Operating in Kansas City and may be expanded to up to 20 communities.
Nebraska Welfare Reform Demonstration	7,700 (Pending State legislation would eliminate cash-out from the demo)	7	Demo focusses on temporary assistance and transition to self-sufficiency. Includes provision for cash-out. Demo will be piloted in two counties in July 1995 with Statewide expansion after 1-2 years.
New York Child Assistance Program (CAP)	3,054	10	In place of AFDC, recipients receive child assistance payments based on household size and earned income. Food stamps are cashed out and combined with the child assistance payment. Operating in 14 counties.
Ohio A State of Opportunity	2,500	5	Time-limited (2 years) subsidized employment. Food stamps are cashed out and combined with AFDC to supplement \$8 per hour job in private industry. Will operate in 7 counties beginning October 1, 1995.
Oregon JOBS Plus	1,200	5	Substitutes private and public sector minimum wage jobs for food stamp, AFDC and Unemployment Insurance benefits. Food stamps are cashed out and combined with other benefits to supplement wages. Operating in 6 counties.

<i>Approved: 21</i>	<i>Number of Food Stamp Cases</i>	<i>Length of Demo (in years)</i>	<i>Summary</i>
Pennsylvania Pathways to Independence	3,800	5	Food stamps are cashed out and combined with AFDC for employed recipients with earned income for 2 consecutive months. Operating in one county.
Supplemental Security Income (SSI)/Elderly Cash-Out	MN - 7,795 NY - 6,477 OH - 18,446 OR - 10,600 UT - 5,364 VT - 6,709 VA - 825 Total - 56,216	14	Allows households in which all members are over 65 years of age or receiving SSI payments to receive food stamp benefits in cash rather than coupons. Authorized under Section 17 of the Food Stamp Act in 1981 and will expire October 1, 1995. The following seven States operate a program: <ul style="list-style-type: none"> ● Minnesota: 1 county ● New York: 1 county ● Ohio: 1 county ● Oregon: 4 counties ● Utah: Statewide ● Vermont: Statewide ● Virginia: 1 county
Utah Single Parent Employment Demonstration Program	2,555	8	Targets AFDC recipients and includes intensive work requirements. Sanctions/incentives tied to participation. Participants may choose to receive food stamps in cash or coupon. Operating in 4 sites with planned expansion to additional sites.
Wisconsin Work Not Welfare	4,000	11	Replaces welfare with time-limited benefits (24 months). Includes the cash-out of food stamps. Operating in two counties.

Question. The fiscal year 1995 Appropriations Act provided funding requested for a modified Food Stamp Program in American Samoa. Please give us a report on the status of this program.

Answer. Under the authority in Public Law 96-597, the Secretary approved the implementation of a modified Food Stamp Program in American Samoa designed to serve low income elderly, blind or disabled persons. This program began on July 1, 1994. In the first six months of fiscal year 1995, benefits in the amount of \$1,579,482 have been issued. Current participation is approximately 2,500 persons per month.

Subject to USDA approval, American Samoa sets its own eligibility criteria, prints its own coupons and earmarks 30 percent of each allotment for the purchase of locally produced foods. The American Samoa Nutrition Assistance Program is governed by a Memorandum of Understanding which capped funding for fiscal year 1995 at \$5.3 million. The Administration has proposed capped mandatory funding for American Samoa.

Food Program Administration

Question. The fiscal year 1996 request proposes to establish a new food program administration discretionary account and seeks to increase funding for these activities by \$6.8 million, from \$134.6 million for fiscal year 1995 to \$141.36 million for fiscal year 1996.

An increase of \$600,000, from the fiscal year 1995 level of \$1.4 million to \$2.0 million, is requested for the Electronic Benefits Task Force. Would you please give us an update on this Task Force and why an increase in funding for this effort is proposed for fiscal year 1996? What activities are being funded now? How does USDA's contribution to this task force compare with the amount of funding other participating agencies have contributed to this effort in each of fiscal years 1995 and 1996?

Answer. In fiscal year 1995, \$1.4 million was used to directly support the continuing efforts of the EBT Task Force related to the implementation of a Nationwide EBT system. Of the \$1.4 million allocated, direct salary and benefit and overhead expenses of the EBT Task Force totaled \$688,019. The remaining \$711,981 was used to fund contractor support for the development of National EBT operating rules and procedures and audit certification guidelines.

It is projected that for fiscal year 1996 additional contractor support and direct EBT Task Force funding will be needed to complete the development of National EBT operating rules and settlement service. Additionally, continued contractor and EBT Task Force support will also

be necessary to sustain the implementation efforts now under way and to expand this effort to include more State implementation efforts.

In fiscal year 1996, the EBT Task Force budget will be derived from the Departments of Agriculture, Health and Human Services (DHHS), Treasury, and the Social Security Administration (SSA). USDA, DHHS, and SSA will each provide \$2 million in support of the EBT Task Force. Treasury will provide direct administrative support and approximately half the level of funding provided by USDA.

Question. An increase of \$4 million is requested to fund Agency initiatives in support of its automation infrastructure. What level of funding is being allocated to these initiatives in fiscal year 1995? What will be funded with the \$4 million requested for fiscal year 1996? What is the total cost of the Agency's automation infrastructure and what level of funding will be required in each future fiscal year to complete the Agency infrastructure initiatives?

Answer. Much of the FCS hardware and software is reaching the end of its life cycle. The requested \$4 million begins the process of upgrading or replacing the oldest portions of this hardware and software.

To determine how to best invest these resources, a comprehensive needs analysis of the Agency's information management requirements is currently underway. The major portion of this needs analysis was funded using fiscal year 1994 funds (\$320,000), but an additional \$20,000 in fiscal year 1995 resources have been added to the report requirements. These are the only fiscal year 1995 resources allocated to the automation infrastructure initiative at this time. Based on the report, which will be final in the fall, final plans for expenditures will be developed.

However, the Agency has determined preliminary planning figures for the requested \$4 million. Approximately \$1.5 million will be used to replace antiquated DOS-based software for electronic mail, word processing, spreadsheets, databases and operating systems. Another \$1.5 million will be used to purchase computers that are capable of using the new software, which many of the Agency's current computers are incapable of doing. Finally, about 25 percent of the Agency's file servers, associated file server software and telecommunication capabilities will be upgraded to improve the Agency's information-sharing abilities. These upgrades are expected to cost \$1 million.

The Agency's initial estimate is that a total investment of \$24.5 million between fiscal year 1996 and fiscal year 2001 may be required. However, all expenditures will be made in accordance with the comprehensive needs analysis referenced above.

Question. You indicate in the testimony that the Agency intends to improve its supervisory ratio from 1:4 to 1:7 by the end of fiscal year 1995. Where are you currently in accomplishing this goal? How are you achieving this reduction?

Answer. Recent data indicates that FCS' overall supervisory ratio is approximately 1:6. This is being accomplished in a variety of ways, including unit reorganizations designed to increase spans of control and eliminate nonessential supervisory positions, reclassification of positions where supervisory duties were no longer being exercised, and the use of nonsupervisory "leader" and "senior specialist" positions in lieu of supervisors where that is appropriate.

Question. The testimony also indicates that the Agency plans to close 10 field locations by the end of fiscal year 1995. Which ten field locations are being closed? When? Are any savings from the closing of these locations, net of any costs to close these locations, included in the fiscal year 1996 request? If so, what level of savings is included in the fiscal year 1996 request from these field location closures?

Answer. The ten field locations and their respective closing dates are as follows: El Paso, TX 9-30-94; Knoxville, TN 3-31-95; Memphis, TN 3-31-95; Mobile, AL 3-31-95; Tuscaloosa, AL 3-31-95; New Orleans, LA 4-1-95; Corpus Christi, TX 4-1-95; San Antonio, TX 4-1-95; Alexandria, VA 6-30-95; and Shawano, WI 9-30-95. Most of these sites are one or two-person offices. A total of 14 employees are affected. Three retired and the remainder are being reassigned to other FCS facilities. These locations were selected for closure because of their relative high cost of operation and because the workload could be performed more efficiently at other, larger agency facilities.

Because of uncertainties over the timing and cost of closing these field locations at the time the fiscal year 1996 budget request was finalized, no estimate of net savings was included. Rent and utilities for all but one of these locations are paid out of a central fund at the Department and are not part of the Agency's budget request. However, costs for relocating staff are borne by the Agency, and change-of-station costs, especially those involving claims for reimbursement for the sale and/or purchase of homes expected to be filed in fiscal year 1996, will likely offset any savings to be realized next year from the three retirements. We anticipate that net savings, if any, will not begin to be realized until fiscal year 1997.

Question. The testimony indicates that the Agency plans to reduce FTE ceiling levels by 10% by the end of fiscal year 1999. This reduction will include a 10% reduction in headquarters and administrative staff.

Would you please provide the FTE reductions planned, including the headquarters and administrative staff reductions, in each of fiscal years 1996 through 1999 and identify the budgetary savings from these reductions for each fiscal year.

Answer. The 10 percent reduction of Full-Time Equivalent staff-year ceiling levels is based on fiscal year 1993 staff-year level of 2,008. In order to reach the reduced level of 1,813 -- a reduction of 197 or nearly 10 percent -- by the end of fiscal year 1999, a reduction plan will be used. The plan is submitted for the record.

[The information follows:]

Food and Consumer Service
Staff Year Reduction

	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	Total
Total Staff Years ¹	1,932	1,941	1,941	1,913	1,872	1,813	N/A
Reductions:							
Headquarters	-3	-3	-2	-2	-2	-4	-16
Administrative staff	-7	-4	-5	-6	-5	-4	-31
Total Reductions	-56	-11	0	-28	-41	-59	-195

The following budgetary savings from these reductions are based on a 3 percent inflation factor applied to the average salary and benefit of \$54,184 for fiscal year 1995.

	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999
Savings	3,049,392	3,738,696	3,850,857	5,575,929	8,170,748	12,013,960

¹ The totals include an increase of staff years for the Center for Nutrition Policy and Promotion per memorandum from the Deputy Secretary, USDA. Total staff year authorizations for the Center are as follows:

<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
31	31	30	29	29

CENTER FOR NUTRITION POLICY AND PROMOTION

Question. The fiscal year 1996 USDA explanatory notes indicate that fiscal year 1995 funding of \$2,218,000 and 31 staff years were transferred from the Agricultural Research Service to create a Center for Nutrition Policy and Promotion within the Food and Consumer Service. Also, I note that the budget proposes to increase the Center's budget by an additional \$2.0 million for fiscal year 1996, for a total of \$4.218 million.

The new Center for Nutrition Policy and Promotion is said to be needed to develop nutrition promotion policy goals for USDA food assistance program customers and American consumers and to coordinate nutrition education activities and nutrition policy analysis within the United States Department of Agriculture.

Why did you determine it necessary to create a new entity to carry out these goals? How do you justify the additional federal cost of this new Center, as proposed in the fiscal year 1996 budget?

Answer. USDA established the Center for Nutrition Policy and Promotion to improve the nutritional health of all Americans by linking scientific research to the consumer. The Center is an innovative and energetic approach to promote healthy diets to all consumers, including customers of USDA's food assistance programs.

Despite consumer awareness of the link between diet and health, most Americans have not yet adopted healthy eating habits. In some ways, the public is backsliding in its quest for a healthier diet. To improve health for the future, Americans need to develop lifestyle skills that enable them to make food choices for a healthful diet.

USDA is committed to improving the nutritional health of American consumers. In the past, however, USDA's nutrition policy and education functions were fragmented and often tied to specific food assistance programs--an issue raised in recent General Accounting Office reports.

The Center will help overcome this fragmentation by serving as USDA's focal point on nutrition policy and promotion. The Center will streamline USDA's efforts to meet the nutritional needs of all Americans. Thus, the Center will maximize the return on USDA's investment to improve the nutritional health of Americans.

As part of this effort, the Center manages the preparation and promotion of "Nutrition and Your Health: Dietary Guidelines for Americans." This consumer brochure translates the technical report issued by the Dietary Guidelines Advisory Committee into nutritional and dietary guidance for the general public. Title III of the National Nutrition Monitoring And Related Research

Act of 1990 (Public Law 101-445) requires that USDA and the Department of Health and Human Services update the Dietary Guidelines every five years. The fourth edition of the Dietary Guidelines for Americans is scheduled to be issued in 1995.

The proposed funding for the Center in fiscal year 1996 will enable USDA to promote the updated Dietary Guidelines for Americans to consumers. In addition, the Center will work with key groups within and outside government to identify nutrition promotion needs, develop appropriate and effective messages, and participate in cooperative opportunities for improving the nutritional health of all Americans.

Question. Are any of the Center's staff not employees transferred from the ARS pursuant the memorandum of understanding? If so, from which funds are these people being paid? Are these newly-hired employees or employees transferred within the Food and Consumer Service? If transferred, where were they working and what functions were they performing?

Answer. The assignment of functions to the Center for Nutrition Policy and Promotion (CNPP) included transfer of 31 positions, 29 F.T.E.'s from Agricultural Research Service (ARS). At the time, three of these positions were vacant. All of the originally vacant positions, and those which became vacant since the Center was established, have been filled or are pending response to a job offer following established USDA procedures for hiring; all are being funded by monies being transferred from ARS. The CNPP Executive Director was assigned to CNPP from the office of the Under Secretary, Food, Nutrition, and Consumer Services (FNCS) and is currently funded by FNCS. In addition, the Special Assistant to the Executive Director, hired on January 1, 1995, is being paid from funds transferred from ARS.

Three FCS staff are working at CNPP to assist in the transition to FCS operating procedures. These positions have not been transferred to CNPP.

Question. How will the Center's analysis functions differ from the research functions previously done by the Human Nutrition Information Staff while under the ARS?

Answer. The Center's analysis functions will differ in some important ways from the research functions previously done by the Human Nutrition Information Staff (HNIS) while under ARS. While under ARS, much of the research function was devoted to medium- and long-range methodological studies and journal publications. Analysis at the Center is linked more closely to timely output of policy-relevant information and strategies for nutrition promotion. Consumer research data will be analyzed at the Center to understand the consumer's perspective and design consumer-based nutrition promotion

strategies and messages. Food consumption and food behavior data will be analyzed on an ongoing basis and, when needed, on a quick-turnaround basis, to provide policy officials with timely input needed to make critical decisions about the USDA nutrition functions. A number of other research functions, such as determination of the nutrient content of the U.S. food supply, will continue unchanged.

Question. Will the Center be doing research to support the policies and programs it develops, i.e., will the Center conduct or coordinate research to validate the nutrition policy and promotion?

Answer. To achieve its mission, the Center will conduct applied research as needed to evaluate effective communication techniques, understand the consumer's perspective and design nutrition education strategies for meeting the consumer's nutritional needs. The Center will also analyze trends in the nutrient content of the United States food supply, the cost-effectiveness of nutrition promotion programs, and the economics of family food plans. In addition, the Center will conduct analyses, as appropriate, to translate human nutrition research conducted by ARS and others into consumer-oriented nutrition promotion messages.

The Center is committed to providing nutrition promotion messages that are consistent, effective and science-based. To this end, the Center will ensure that its applied research and analysis will be objective, meet scholarly standards and pass rigorous peer review.

Question. Please define and distinguish the nutrition research, education and other nutrition related functions of the Agricultural Research Service from those of the Food and Consumer Service.

Answer. Human nutrition research and education activities in USDA are linked with the nutritive value of foods, human nutritional needs, the kinds and amounts of foods Americans consume relative to their needs, and strategies for improving diets and food supply.

The mission of ARS specifically related to human nutrition research is twofold: (1) to develop new knowledge and technologies which bear directly to providing an adequate supply of agricultural commodities and (2) to improve the nutrition and well being of the American people. The ARS nutrition research functions which are in place to accomplish this mission are: (1) to conduct human nutrition research specific to nutrient requirements throughout the life cycle; (2) to conduct research on the role of nutrition in preventing diet-related disorders, such as cancer, osteoporosis, and obesity; (3) conduct research on food composition and nutrient analyses to develop and maintain food composition databases; (4) to conduct food consumption

surveys, including the Nationwide food consumption surveys; and (5) to coordinate, plan and conduct research as mandated in the National Nutrition Monitoring Act of 1990 on functions named above.

The mission of FCS is to administer Food Assistance Programs which provide access to a more nutritious diets for persons with low incomes, and encourage better eating patterns among America's children. The FCS nutrition related functions which are in place to accomplish this mission are: (1) to administer the Food Stamp Program; (2) to administer the Child Nutrition Programs; (3) to administer the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and (4) to administer commodity supplemental foods and donated food programs.

FCS is also actively involved in nutrition studies and education related to the programs it administers. These include the Nutrition Education and Training (NET) program which instructs educators and students on nutrition fundamentals and good eating habits, and the National Food Service Management Institute (NFSMI) established to provide nutrition instruction to educators and food service personnel.

The mission of CNPP is to improve the nutritional status of all Americans by linking scientific research to the needs of the consumer. It coordinates USDA's efforts to integrate the information from the scientific research of such agencies as ARS with the nutrition education messages and implementation policies of other government agencies. The CNPP nutrition related functions which are in place to accomplish this mission are: (1) to translate nutrition research into usable information for health professionals, consumers and the private sector; (2) to evaluate effective communication techniques and develop and promote dietary guidance materials for nutrition and health professionals and consumers; (3) to analyze trends in the nutrient content of the U.S. food supply; (4) to develop the USDA family food plans; (5) to conduct cost-effective analyses for nutrition promotion programs, and to develop new techniques for nutrition policy analysis; and (6) to evaluate the impact of nutrition programs and Federal interventions on nutritional well-being and dietary behavior.

Specifically, ARS focuses on laboratory and clinical research. FNCS applies this information to its food assistance and nutrition education activities which focus on low-income families. CNPP translates this information into dietary guidance and education materials to be used by all Americans. Additionally, CNPP uses food consumption survey and food composition data to update the U.S. food supply series and the USDA family food plans. CNPP does not duplicate functions carried out in other parts of the Department. It provides a coordinating mechanism for nutrition promotion activities throughout the Department.

Question. The fiscal year 1996 request for the Center for Nutrition Policy and Promotion is \$4.2 million, an increase of \$2.0 million above the fiscal year 1995 level. Please be specific as to how the funds requested will be spent.

Answer. Of the \$4.2 million request, \$2.2 million is to carry out the basic activities of the Center, which include:

- o Publishing, in conjunction with the U.S. Department of Health and Human Services, "Nutrition and Your Health: Dietary Guidelines for Americans".
- o Coordinating nutrition education policy within the USDA.
- o Providing leadership within the Department to prepare and update the report on the "State of Nutrition Education in USDA".
- o Developing and coordinating nutrition policy options within USDA, including the U.S. Plan of Action for Nutrition.
- o Evaluating the nutrient content of the U.S. food supply. One of the Government's longest running historical efforts (begun in 1909), this evaluation documents the amounts of nutrients which are available to American consumers.
- o Publishing the "Family Economics and Nutrition Review" on a quarterly basis.
- o Publishing "Expenditures on Children by Families" and preparing periodic updates on the cost of family food plans and of raising children. One of the food plans, the Thrifty Food Plan, serves as the nutritional basis for determining Food Stamp Program benefits.
- o Developing and evaluating dietary guidance concepts, materials, tools, and techniques based on current nutrition research for consumers, professional groups, and others in the food and agricultural sectors.
- o Investigating techniques for effective nutrition communication for general population as well as specific target groups including low income individuals; at risk women, infants, and children; older adults; and diverse racial/ethnic populations.

- o Providing analytical support on nutrition to the office of the Under Secretary, Food, Nutrition & Consumer Services.
- o Evaluating the impact of nutrition programs, and Federal interventions on nutritional well-being and dietary behavior and assessing the cost effectiveness of alternative interventions on food consumption, food expenditures, food related behavior, and nutritional status.
- o Analyzing the food and nutrition related data from USDA surveys and other sources, and developing improved methods of analysis.

An additional \$2.0 million has been requested for fiscal year 1996 to incorporate the 1995 edition of the Dietary Guidelines for Americans into a comprehensive Nutrition Promotion Program for all consumers, including USDA food assistance consumers. Specifically, the Center will use the proposed funding to develop nutrition promotion goals for all Americans, conduct research on the consumer's perspectives and needs, design consumer-based nutrition promotion strategies and messages, and evaluate cost-effective communication techniques. The proposed funding will also enable the Center to create innovative public and private partnerships that promote food choices for a healthful diet. The Center may also use a small portion of the proposed funding to explore the feasibility of establishing a toll-free hotline to provide nutrition information to all consumers with nutrition questions.

Question. Will the Center continue all work previously carried out by the ARS staff transferred to the Center? What work, if any, previously performed by these individuals before they were transferred will be discontinued or altered? Please be specific.

Answer. The majority of the work carried out by the ARS staff transferred to the Center has been continued. Work transferred includes research on food behavior, dietary appraisal, child cost estimates, food supply and food plans; nutrition promotion; Dietary Guidance Working Group and Dietary Guidelines responsibilities; and publication of the quarterly journal.

Several functions, however, will be discontinued or transferred. The food laboratory was not continued as it was found not to be cost-effective as an ongoing operation. Recipe development and testing previously conducted in the food laboratory will in the future be procured from universities and commercial sources. Two social science research projects were not continued in order to address the expanded mandate of the Center. These projects are Economic Research on the Status of the 1946-1964 Cohort (baby-boomers) and Economic Research on Single-Parent Families. Further USDA research on these

groups is not needed at this time because of the volume of research on these groups already completed or underway by non-USDA entities.

NUTRITION PROGRAM FOR THE ELDERLY

Question. The fiscal year 1996 budget request for the Nutrition Program for the Elderly is \$151.2 million, an increase of \$1.25 million above fiscal year 1995. This request would support 252.4 million meals, an increase of 2.5 million meals above fiscal year 1995 at a rate of 59.9 cents per meal, 0.1 cent below the fiscal year 1995 per meal reimbursement rate.

The fiscal year 1996 request would permit participation in the Nutrition Program for the Elderly program to continue to grow from 249.9 million to 252.4 million meals at a slightly reduced per meal reimbursement rate. How does the 2.5 million increase in participation compare to the demand to increase participation in this program?

Answer. The fiscal year 1996 meal service projection was based on the number of meals projected to be served in fiscal year 1995. However, final meal service data for the first quarter of fiscal year 1995 reveal a program growth rate of 2.3 percent--over twice that projected for the entire year. While preliminary second quarter meal service data indicate that this upward trend in meal service is continuing, it remains to be seen if the increase will persist throughout the fiscal year. Should meal service continue at its current rate, fiscal year 1996 meal service will exceed the Department's projected increase of 2.5 million meals.

Question. What additional funds above the fiscal year 1996 request level would be required to maintain the fiscal year 1995 per meal reimbursement rate?

Answer. Based on budget projections, the increase would be \$252 thousand. However, final data for the initial quarter of fiscal year 1995 show substantially higher growth in meals served than anticipated (2.3 percent vs. the projection of 1.1 percent). If current trends continue, funding may be insufficient to maintain the rate of 60.0 cents in fiscal year 1995.

Question. What is the authorized per meal reimbursement rate for fiscal year 1996? What additional funding would be required above the rest to fund the fiscal year 1996 authorized rate per meal?

Answer. The authorized rate is 65.9 cents, 6.0 cents higher than the recommended level. Based on the fiscal year 1996 meal projection of 252.4 million, an additional \$15.1 million would be needed to fund meals at the authorized rate.

NATIONAL FOOD SERVICE MANAGEMENT INSTITUTE

Question. P.L. 103-448 directs USDA's Food and Consumer Service to enter into cooperative agreements on a noncompetitive basis with the National Food Service Management Institute (NFSMI) to help carry out Nutrition Guidelines. Please describe the cooperative agreements entered into with NFSMI.

Answer. We have identified three specific activities for which we have received proposals from NFSMI. These activities include a product specifications supplement to a food buying guide, the continuation and expansion of NFSMI's "Healthy Cuisine for Kids" workshops, and the establishment of a help desk/hotline service for school service personnel. Each of these activities fits well within our overall effort to provide assistance and support to the food service community as we move ahead to implement our School Meals Initiative for Healthy Children, and each activity is consistent with the Congressionally-established mission of NFSMI.

We are currently negotiating with the Institute with respect to the actual work to be performed and the cost to the government for these services. We expect cooperative agreements to be in place before the end of June 1995.

Question. The Congress appropriated \$20.4 million for fiscal year 1995 for USDA's Food and Consumer Service to use in carrying out nutrition initiatives. Under Secretary Haas, you indicated in a letter to me last year that the Department would utilize NFSMI in these initiatives. What amount of fiscal year 1995 funding provided for nutrition initiatives will be provided to NFSMI and for what purposes?

Answer. We have earmarked a significant amount of fiscal year 1995 funds for the three non-competitive cooperative agreements we are presently negotiating with the Institute. However, because these negotiations are on going, it would be inappropriate at this time to indicate the level of funding we have set aside. As soon as the negotiations are complete and we have made our awards, we will advise the Committee of the funding commitments.

Question. USDA is requesting over \$40 million in fiscal year 1996 to carry out nutrition objectives. How does the Department plan to use the NFSMI in expanding training and education in fiscal year 1996? With a request for twice as much funding for this purpose, what additional activities will NFSMI be carrying out?

Answer. What you refer to as "a request for twice as much money" for nutrition objectives is actually a restructuring of our budget accounts, representing a much smaller increase in our request. We created this year a

new account, which is called Nutrition Initiatives and Required Research. The account now contains funding for the Center on Nutrition Policy and Promotion, Food Stamp Research, State Exchange Programs, and existing grants for nutrition education in the Food Stamp Program. In the area of child nutrition, it also contains funding for the child nutrition research account, support for demonstration projects for proprietary Child Care Centers in Kentucky and Iowa, and grants for food service technical assistance to feed disabled children, and support for the School Meals Initiative for Healthy Children. The 1995 amounts represent a combining of the funds appropriated for those activities that have formerly been displayed under the Child Nutrition or Food Stamp program accounts.

The fiscal year 1996 request for this account is about \$7 million more than was appropriated in fiscal year 1995. Increases are requested for Nutrition Promotion Initiatives for the Center on Nutrition Policy and Promotion, Child Nutrition Research, and support for the School Meals Initiative.

With regard to funding to support the School Meals Initiative for Healthy Children, our overall plans for use of fiscal year 1996 funds have not yet been fully developed. Therefore, we have not yet had the opportunity to identify activities for which the Institute may be interested in undertaking. It is almost certain that the help desk/hotline that we have asked the Institute to develop this fiscal year will be continued in fiscal year 1996. Beyond this activity, however, we will need to explore with the Institute their interest in additional activities in support of our School Meals Initiative for Healthy Children.

Question. The Department request for NFSMI is \$2 million which is the amount the Congress established by law last year. Additional fiscal year 1996 funding is requested for the Department to carry out education and training. What is your rationale for not seeking discretionary funding for NFSMI since its role was expanded by P.L. 103-448 to help carry out nutrition initiatives?

Answer. The Institute was established as an independent resource to the school food service community, and was not envisioned as an arm of the Department to conduct activities that would otherwise be the normal and on-going responsibility of the executive branch of the Federal government. To this end, our arrangement with the Institute is in the form of a grant that precludes excessive Federal direction and oversight in the Institute's activities or technical assistance agenda. We believe this is an appropriate arrangement, and we do not dictate to the Institute the nature of the training and technical assistance activities that they deem important and appropriate.

However, you are aware of the significant budget pressures on discretionary spending, and we are unable to request discretionary funding except for our highest priority items. However, we will continue to work with the Institute as we make plans to use fiscal year 1996 funds to support the School Meals Initiative for Healthy Children.

Question. The Congress established NFSMI in 1989 to conduct activities to help improve the quality and operation of Child Nutrition Programs and directed it to conduct applied research, education, and training and operate a clearinghouse. You have requested \$49.7 million for fiscal year 1996 for nutrition purposes. How does the Department perceive the role of the NFSMI? Is the Department setting up a new structure for Education and Training to provide training for the same child nutrition personnel?

Answer. As I indicated earlier, the \$49 million request for Nutrition Initiatives and required research consolidates a number of line items that were displayed within program accounts into a new separate account. The money requested in this account covers existing programs like the NET program, FCS research accounts for Food Stamps and Child Nutrition, the activities of the Center for Nutrition Analysis and Promotion, support for implementing the School Meals Initiative for Healthy Children, and other activities. Of the \$49.7 million requested for fiscal year 1996, all but about \$7 million supports activities that are ongoing in fiscal year 1995, including Team Nutrition's nutrition education and training and technical assistance initiatives.

We perceive the role of NFSMI in training child nutrition personnel to be as envisioned by Congress when the NFSMI was initially established. The Institute serves as an independent resource to the school food service community. In this role, the Institute has moved ahead to initiate training and technical assistance activities for child nutrition personnel. The institute, for example, has been very active in promoting the incorporation of the Dietary Guidelines in school menu planning/meal production and has developed workshops and materials emphasizing proper nutritional management of special school populations. In these and other ways, we believe the Institute's activities have supported and reinforced the Department's initiatives to provide school food service personnel with the skills and resources necessary to provide students with meals that meet updated nutritional standards and appeal to children.

However, the importance of the Nutrition Initiatives and the size of the audience to be reached makes it imperative that we use a variety of avenues to reach the school food service community and school children across the country. The Department will use grants to States, partnerships with public and private organizations, and

development of children's communications and technology strategies, as examples, as well as work through the Institute. The Department has a special responsibility to assist State and local child nutrition personnel.

The activities of the NFSMI and the Department complement, rather than compete with each other.

Question. Of the \$20.4 million in fiscal year 1995 for dietary guidelines implementation, the Department set aside \$10 million for training. It appears that your plans for NFSMI include only one training project, i.e., the series of workshops called "Healthy Cuisine for Kids." What other training will be done with the \$10 million? Do you plan to fund additional Healthy Cuisine workshops in fiscal year 1996? What funding is included in the fiscal year 1996 request for this purpose?

Answer. Of the approximately \$10 million that was set aside for training in our fiscal year 1995 budget, we intend to fund three new activities through non-competitive cooperative agreements with the Institute--additional "Healthy Cuisine for Kids" workshops, food product specification materials to support the food buying guide the Institute is developing, and the creation and implementation of a school food service hotline/help desk. Because we are still negotiating with the Institute concerning these projects, the exact amount of funding involved has not yet been determined.

Nearly half of the \$10.1 million budgeted for training and technical assistance has been set aside for Team Nutrition Training Grants, a program of competitive funding to assist States in developing a sustainable infrastructure of training programs that help local school districts to implement and update nutrition standards. The other two major initiatives to be funded with this money are a series of regional workshops to prepare State personnel to train local school food service personnel on the new menu planning options that will be available to them in School Year 1995-96 as a result of our School Meals Initiative for Healthy Children; and, the printing and distribution of more than 50 new school food service recipes that feature meals that are appealing, exciting and consistent with the Dietary Guidelines. These recipes, which have been under development for two years, feature creative ways to use USDA commodities in school meals and offer school food service personnel the opportunity to explore with their students meals which reflect the cultural and ethnic diversity of America.

Insofar as our fiscal year 1996 request is concerned, we will consider the possibility of funding additional "Healthy Cuisine for Kids" workshops to the extent that the Institute believes these workshops have been successful and are in demand by local school food service personnel. We will, of course, explore other mutually

beneficial activities that the Institute might undertake that are consistent with the Institute's mission and can be accommodated within the Institute's own fiscal year 1996 training and technical assistance agenda.

Question. What are the new activities that you propose for the NFSMI in fiscal year 1996 in addition to the ones initiated or proposed to be initiated with fiscal year 1995 funding?

Answer. In the budget submitted to the Department for the Institute's fiscal year 1996 grant, the Institute has proposed several new projects--studies of school food service equipment needs and the development of guidelines for use of such equipment, studies to determine ways to improve student acceptance of school lunches, a study to identify costs of meeting the nutritional needs of children with special needs, exploration of the potential application of computer simulation in meal service activities, initiatives to improve skills of personnel involved in child care food service, initiatives to upgrade food service management processes, and conducting a trends conference that would bring together futurists to consider trends in Child Nutrition Programs. These projects would be in addition to work that the Institute presently has underway that would continue in fiscal year 1996. Given that the Institute is also embarking on a major construction project to upgrade institute facilities, fiscal year 1996 promises to be an exceedingly busy time for the Institute's management and personnel.

Because of the independent relationship that the Institute has with the Department, we would not insist that they take on any project, but as we are planning the fiscal year 1996 use of funds for the School Meals Initiative, we will consider what projects would be profitable collaborative efforts.

Question. USDA has indicated that you will incorporate nutrition education into all your food assistance programs. A very high percentage of food stamp recipients have school-age children. It would seem logical for the NFSMI to be used for nutrition education for food stamp recipients. How do you plan to bridge the gap between school and home for children from households that receive food stamps? Will the NFSMI be used?

Answer. We intend to commit a significant emphasis on nutrition education for participants in all our nutrition programs, including the Food Stamp Program (FSP). The Administration's 1995 Farm Bill guidance includes proposals to better integrate nutrition into all Federal food programs, and to develop nutrition promotion activities that can help all Americans make and enjoy healthy food choices.

We believe that we share with the Institute the conviction that upgrading the nutritional awareness and smart food choice skills of all American families will depend on how successful we are in changing the dietary practices and preferences of school age children. Children's tastes play a major role in what families serve at the dinner table, and in that sense, the Institute's work to improve child nutrition can be of major support to the Department in our emerging plans to incorporate nutrition education in programs such as FSP.

However, we do not believe we can fund the Institute to take on activities that are not directly related to Child Nutrition Programs (CNP). The Institute's authorizing legislation clearly directs the Institute's Federally-funded activities toward the support of CNP. To the extent that the Institute receives funding from sources other than FCS, however, we would encourage the Institute to pursue initiatives that reinforce our effort to integrate sound nutrition guidance into all our Food Assistance Programs. We would be happy to work with the Institute in this regard to ensure coordination and collaboration of our respective efforts.

ELECTRONIC BENEFITS TASK FORCE: IEI APPROACH

Question. The USDA participates in an interagency task force appointed by Vice President Gore, working within the Treasury Department recently issued an "invitation for an expression of interest," a little used procurement method, to acquire this national Electronic Benefits Transfer (EBT) system.

Under the invitation for an expression of interest (IEI) to acquire a national EBT system, isn't it true that retailers are supposed to pay transaction fees to banks? In state-initiated programs, such as Texas Lone Star, aren't fees paid to the retailers? Is IEI fair to retailers in this respect?

Answer. Several States implementing EBT systems have negotiated fee arrangements with retailers who already had point-of-sale equipment. These fees have varied by State and may involve payment directly to retailers or to the retailer's terminal service provider. There are also State EBT systems where there is no transaction fee at all.

The IEI seeks to establish a uniform basis for the fees that are routinely charged in debit card networks. These fees vary across the networks in terms of who pays and how much is paid per transaction. For food stamp retailers, the goal is to mirror the commercial fee structure as much as possible. It is common for retailers to pay network fees, sometimes through the monthly fee to their service provider, that covers any transaction fees involved in using a regional network. It is hoped that retailers will install their own

equipment and, at least with the IEI States, absorb some portion of the network fees for EBT as well. Retailers will always have the option to have their service provider (a bank or third party processor) directly link to the EBT system provider if it is more economical. Our goal is to enable retailers to determine their business relationships based on the best business case for them.

Question. What are the other ways to make electronic food stamp benefits portable from state to state? (The IEI Treasury approach, using ATM's is very expensive.)

Answer. Food Stamp benefits cannot be accessed at ATM's; however, the existing point-of-sale (POS) networks offer one option for making food stamp benefits portable from State to State.

There are currently efforts underway between existing EBT States to achieve portability through alternative means. For many States, the issue of food stamp portability is only important to the extent that their recipients are able to shop in adjacent States. Portability across borders can be accomplished by having the EBT processors' systems connected directly, or by using a gateway service that acts as a switch between processors.

FCS is working with a contractor to develop technical specifications that would facilitate interstate transactions and standard interfaces for all retailers. This technical specification, together with related agreements, will allow all States regardless of which procurement type they choose, to accommodate interstate transactions without having to go through networks or develop complex technical interfaces for each different processor.

Question. Aren't there other ways to assure "portability of benefits" across state lines other than by piggy-backing on expensive bank-owned ATM networks?

Answer. Yes. As stated in the previous answer, FCS is working with a contractor to develop technical specifications to facilitate interstate transactions. States can utilize these interfaces such as gateway services and direct connections between processors.

Question. Do you feel that the EBT approach, promoted through the IEI at Treasury, is at odds with the policy trend toward increasing the role of the states with respect to welfare?

Answer. No. The IEI does not limit a State's role in managing its welfare system or in choosing the way it delivers food stamp benefits. We believe EBT is a flexible system that is adaptable to any changes in the benefit programs themselves. And the IEI does not change

this flexibility. First, use of the IEI is at the State's option. Second, States still would have options on design, development, and operation of their EBT systems within the IEI. Many States have indicated the IEI process would facilitate their acquisition of an EBT system.

Question. Is it possible that this whole federal benefit security card bureaucracy could be obsolete before the IEI procurement is even implemented?

Answer. The intent of the Federal agencies is not to set up a separate bureaucracy to manage EBT but to establish an EBT framework within which Federal direct benefits such as Social Security and State-administered benefits such as food stamps can be managed. States will have flexibility to adapt the EBT system to changes in the benefit programs they administer. States that do not see their programs fitting will continue to be able to implement EBT on their own. Regardless, EBT will remain a viable option for States, in spite of any changes that may result from legislative changes or other future activity.

Question. In the past, the Food and Consumer Service has vigorously supported a state-initiated approach to EBT. Examples include the Lone Star program in Texas and the Independence program in Maryland. Why has the agency adopted the IEI approach rather than the state-initiated approach?

Answer. FCS has not abandoned the State-Initiated approach to EBT in favor of the IEI approach. States are not required to use the IEI process and are free to release a Request for Proposal (RFP) to procure EBT services if they choose. The Federal EBT Task Force's report to the Vice President lays out two converging paths for States to use in order to achieve the goal of Nationwide EBT: the Joint-Venture Prototype and State-Initiated EBT. Both paths remain available to States and are designed to achieve a uniform operating environment while allowing States the flexibility to determine the most appropriate path for their circumstances.

Each approach offers advantages to States depending on their individual needs. The IEI gives States the ability to acquire a generic "off the shelf" system for EBT. Alternatively, some States may prefer the increased autonomy and flexibility that the RFP process provides or may not be able to utilize the IEI process because of State procurement rules. The agency will support States in their EBT efforts, regardless of the path they select.

Question. If it is cost reduction, what and where are the cost reductions of the Treasury/IEI approach to EBT in contrast to, say, the approach used in Maryland and Texas for statewide EBT?

Answer. Variations in the size and demographics of the States make it conceivable that either procurement method may be cost effective. Early projects clearly demonstrated the cost effectiveness of EBT, but also demonstrated that the fixed costs required to implement a system could be high. By spreading these fixed costs over multiple programs to large numbers of recipients, States can reduce per case costs. Using the IEI approach and adding Federal direct programs can significantly increase case volumes. The resulting volume discounts may outweigh the additional costs of network fees. Also, as groups of States join together to procure, design, develop, and test systems, they should all benefit from reduced operating costs brought about through economies of scale.

Question. Recently, Vice President Gore's IEI Task Force has argued that a state-run EBT system is a closed system and the IEI EBT would result in an open system. Can you explain the differences in those two approaches?

Answer. We use the term, "open system" to describe a system that can process transactions from all retailers, including those using different processors for their commercial systems. Another characteristic of an open system might be the support of interstate transactions. A "closed system", on the other hand, would be a system that supports neither communication with other systems nor interstate transactions. Current State-administered systems do communicate with other commercial systems in each State. This is a design requirement imposed by Food Stamp rules. However, these systems do not support interstate transactions to date - because they have not been asked to do so. Consequently, in technical terms, we would describe these State-administered systems as "closed". We anticipate that interstate communication between State-administered systems may be in place soon - i.e., State systems may be fully "open" in the near future.

Perhaps regrettably, as you have indicated in your question, the term "open system" has been used to describe the IEI approach and "closed system" has been used to describe the State-administered approach. This is because the IEI approach is "open" in the sense that it requires full integration with existing regional networks, thereby allowing the networks to "automatically" handle necessary interfaces. The State-run approach needs to achieve such "openness" through specific steps such as direct interface development or use of other gateway services.

It is important to note here that, while each approach theoretically has its advantages, there is no evidence that one is more cost effective than the other. Nevertheless, the Vice President's report envisions an "open system" whereby card use is not limited by State boundaries of other borders, such as specific terminal or

access points. The approach advocated by the EBT Task Force would allow universal access to benefits by card users, just like other debit or credit card users, and minimize risks for all stakeholders.

Question. Is it true that the federal government will pay 50% of the EBT implementation costs for states using IEI, and zero for states that choose their own EBT procurement methodology?

Answer. No. States opting for a RFP approach will receive the same 50 percent funding as those States using the IEI.

Question. Is this consistent with the "two track approach" that your agency endorses?

Answer. Yes. States will not receive preferential treatment in terms of funding if they opt to use the IEI. States using the RFP approach will be able to take advantage of the same benefits available to States using the IEI. FCS is committed to supporting both paths equally. This includes comparable funding arrangements as well as technical support for all States.

Question. Does the benefits security program, as designed by the EBT Task Force, require the creation of a new permanent bureaucracy, either within an existing agency or as a new and separate one?

Answer. There are no plans to set up a separate bureaucracy to manage EBT but there will have to be a framework within which Federal direct benefits such as social security and State administered benefits such as food stamps can be managed.

Question. Why has there been no period of public review and comment concerning a procurement as huge and as vital to society as the "electronification" of the entire welfare system?

Answer. In general, public review and comment is not used for procurement vehicles. Neither Federal nor State law requires this to be done.

Beyond this, EBT regulations ensure necessary uniformity within and between States, while keeping implementation requirements flexible enough to permit States to tailor systems to the needs of consumers, retailers, banks, and other stakeholders. These regulations were developed with public comment. The IEI complies with these regulations except in the limited instances where State-requested waivers were granted.

It should be noted that, in the case of the IEI, Treasury, the EBT Task Force and the SAS have numerous informational sessions to inform the public of their

intent. While not a formal comment process, it did allow the concerns in the community to be heard.

Question. For what accounting of the task force's expenditures is USDA responsible and what are the nature of the expenses?

Answer. USDA is responsible for the salaries and expenses of the USDA employees that have been detailed to the task force along with a portion of the remaining task force costs from contracts issued by the Treasury Department. The costs requested for fiscal year 1996 are submitted for the record.

[The information follows:]

Salaries and Benefits	\$359,000
Travel	195,000
Rent, Communications & Utilities	116,000
Printing	52,000
Supplies	52,000
Equipment	26,000
Contracts	1,200,000
TOTAL	\$2,000,000

QUESTIONS SUBMITTED BY SENATOR SPECTER

FOOD STAMP PROGRAM

Question. You mentioned in your testimony your department's commitment to fighting fraud and abuse in the Food Stamp Program. Yet the USDA continues to consider the possible international printing of U.S. Food Coupons even though the U.S. Secret Service and the USDA Office of Inspector General have advised against allowing food coupons to be printed in a foreign country. Could you share your thoughts on this issue with the Subcommittee?

Answer. USDA sought the advice of the U.S. Secret Service (SS) and the USDA Office of Inspector General (OIG) regarding the issue of allowing food coupons to be printed on foreign soil. Both OIG and SS indicated that foreign production of food coupons would increase the risk of misappropriation, theft and counterfeiting; this is due to legal, practical and logistical constraints on conducting investigations abroad.

After reviewing the various issues involved, USDA has decided for security reasons to limit the production of food coupons to companies located in the United States. The Request for Proposals for the printing of food coupons was issued by USDA on April 20, 1995. The closing date for the submission of proposals is June 30, 1995.

Question. In your testimony, you mention the Electronic Benefit Transfer program and you department's commitment to the program. Could you share with the Subcommittee any results of data collected by the USDA, such as cost savings, that attest to the success of the initial eight EBT pilot projects implemented in 1994?

Answer. Of the USDA sponsored demonstrations, the Statewide Maryland EBT project is the largest and most comprehensive. An evaluation of the system, released in 1994, confirmed that a large-scale, multi-program EBT system is technically feasible and that such a system can achieve cost-neutrality government-wide while maintaining high quality service for recipients. Some of the major evaluation findings were as follows:

- **Large scale operation of a multi-program EBT system on a single card is technically feasible.** The Maryland system has been operating Statewide since April 1993 and successfully distributes benefits to an average monthly caseload of 257,000 households. Recipients are able to redeem their benefits at 3,000 food retailers as well as through 1,800 automatic teller machines (for cash program benefits). Federal and State agencies have effectively negotiated and managed a cost sharing agreement to pool budgetary resources and share system savings among all agencies.
- **Quality of service has been maintained: substantial majorities of recipients, retailers, and financial institutions prefer the EBT system to the check or coupon system.** The preference for EBT was 8-to-1 or better among each of these constituencies. Check cashing organizations were the only constituent group to express uniform dissatisfaction.
- **Overall, the Maryland EBT system yielded an administrative savings over paper, although the decrease in resource costs is small.** EBT costs \$0.039 less per case a month than paper. This translates to annual administrative savings of almost \$120,000 in a system processing average monthly payments of over \$58,000,000. An additional \$750,000 in annual savings will likely occur as volume discounts in vendor billing fees become effective. At current

caseload levels, this translates into \$0.24 per case month additional savings.

- **The reduction in resource costs for delivering benefits for the Food Stamp Program savings was large enough to offset higher costs in cash-benefit programs.** The total annual administrative cost of issuing Food Stamp Program benefits is reduced nearly \$1.3 million. These savings are largely offset by about \$1.2 million in higher resource costs for Aid to Families with Dependent Children, Bonus Child Support, Disability Assistance Loan Program, and Non-Public Assistance Child Support. Resource costs are higher for the cash programs largely because of the high cost of cash withdrawals from ATMs relative to food purchases at point-of-sale terminals.

Question. Do you foresee food stamp recipients encountering any difficulty in purchasing food in states other than their residency if the food stamp program funding were to be block granted and administered by states?

Answer. If the Food Stamp Program were turned into a block grant, there could conceivably be 50 different State-operated programs for delivering food assistance to low-income Americans. Under the current FSP system food stamp benefits are portable. In other words, recipients can use their benefits to purchase food at any authorized store in the Nation. Under a block grant this may not be true. States are likely to have benefit delivery systems that are incompatible with each other, and could have different standards for authorizing stores. The result will be confusion for recipients and, in all likelihood, an inability to purchase food with their food assistance benefits while temporarily in another State.

There are, of course, a variety of other potential problems that could result from block granting the Food Stamp Program:

- **The program would no longer respond to economic changes.** States would have to decide whether to reduce benefits, limit eligibility, or dedicate their own money to nutrition programs.
- **Reduced nutrition assistance would reverse nutritional improvements for low-income families and individuals.** Low-income households are at greater risk for nutrition-related disorders and chronic disease than the rest of the population.
- **Less support for the program, coupled with cash-out of Food Stamp benefits, would result in lower retail food sales, eroded gross farm**

incomes, and, in the short run, job losses. In the long-term, block grants would reduce employment in farm production, food processing, and distribution. The economic effects would be felt most heavily in rural America.

For these and other reasons, the Administration is opposed to block grants for the Food Stamp Program.

QUESTIONS SUBMITTED BY SENATOR McCONNELL

FOOD STAMP PROGRAM

Question. You have indicated that elimination of Food Stamp fraud is one of your top priorities. The 1990 Farm Bill included a provision to curtail co-located wholesale/retail facilities from participation in the Food Stamp Program. Has the Department issued a final rule implementing this anti-fraud provision? If not why?

Answer. The 1990 Farm Bill provision limiting the participation of co-located wholesale/retail facilities in the FSP was implemented on February 1, 1992, in accordance with Public Law 101-642. Implementing guidance was issued to FCS field staff pending publication of final rulemaking. All applications from co-located facilities on or after February 1, 1992, have been processed based on the provisions in Public Law 101-642. There has been a delay in issuing the final rule; however, all policy concerns have now been resolved and the final rulemaking is in clearance.

We are working to implement a variety of other policy changes designed to combat fraud. In March 1995, the Department presented its comprehensive 13-point strategy to combat Food Stamp Program fraud. Our strategy advances our longstanding commitment to eliminate trafficking and other fraud through a three-tiered attack. We seek to improve screening of food retailers entering the program to ensure that only legitimate stores participate; to monitor food retailers so as to identify promptly anyone defrauding the program, and immediately suspend them; and to levy stiffer penalties for violators, including debarment and forfeiture of property gained through Food Stamp fraud.

Promoting Food Stamp Program integrity is a central part of our responsibility to taxpayers to ensure that program benefits are used only as intended -- for food. This reform plan has the potential to simultaneously improve program performance, and minimize costs resulting from benefits lost to fraud.

Question. What financial support does the Department provide for investigating and pursuing trafficking violations? How many staff are involved?

Answer. In fiscal year 1994, the Department spent about \$14.4 million and devoted about 184 staff years to investigate trafficking and other fraudulent use of food stamps and EBT cards, primarily involving retailers. Of these amounts \$4.2 million and 69 staff years were provided by the FCS, with \$10.2 million and 115 staff years provided by the Office of Inspector General.

In fiscal year 1994, the FCS Compliance Branch investigated 4,300 retailers in 1994; 1,338 committed violations serious enough to warrant some period of disqualification, of which 902 committed trafficking violations (normally resulting in permanent disqualification).

States may use food stamp administrative funds (matched at the 50 percent rate by FCS) for anti-fraud activities. In addition, FCS provides coupons which State and local law enforcement agencies may use in conducting trafficking investigations. Dollar and staff year figures are not available on State trafficking investigations; however, we do know that in 1994 FCS was able to disqualify 59 authorized retailers based on State investigations.

Question. What is the Department's financial commitment to overseeing the authorization of stores to redeem food stamps, their reauthorization, and following their performance once they are authorized? How many staff are involved?

Answer. FCS estimates that Regional and field offices spend approximately 212 staff years on retailer oversight (including authorization of stores, reauthorization, monitoring, processing of disqualifications and fines). The financial cost of this staff commitment in fiscal year 1994 is estimated at almost \$13 million.

Question. To what extent can the Agriculture Department's overall commitment to fraud and abuse prevention/pursuit be quantified in terms of Federal staff and funding?

Answer. In fiscal year 1994, FCS estimates that 281 staff years at a total cost of \$17.2 million were spent on retailer management, including retailer investigations and oversight, with similar figures expected for 1995.

Approximately 212 staff years in regional and field offices were spent on retailer oversight (including authorization of stores, reauthorization, monitoring, processing of disqualifications and fines). The estimated financial cost of this staff commitment is almost \$13 million.

FCS devoted 69 staff years to investigating the fraudulent acceptance of food stamp benefits by retailers, including trafficking, at a cost of \$4.2

million. The Department's Office of Inspector General also committed \$10.2 million and 115 staff-years for investigating food stamp benefit trafficking.

As for recipient fraud, it is primarily a State responsibility to prevent and pursue recipient fraud. However, FCS provides funds to support the State fraud control activity, as well as provide Federal policy interpretations, data monitoring, and automated system support. In fiscal year 1994, FCS paid State agencies \$100.7 million in Federal funding for State fraud control activity. Because FCS regional and headquarters staff responsibilities related to recipient fraud include fraud control support activity as well as other functions, it is difficult to quantify the Federal staffing level in terms of full time positions dedicated solely to recipient fraud control activities. Nevertheless, we believe this Federal activity does represent substantial and important support at both the regional and headquarters levels of State fraud control activity.

One example of recipient fraud control activity at the Federal level is our implementing a new electronic information system and computer matching program, the Disqualified Recipient Subsystem (DRS), to collect and disseminate information on individuals who have been disqualified from participation in FSP for Intentional Program Violations (IPV). This system gives States the information needed to assign the legally required penalty for IPVs and provides States with information on recipients who should be serving a disqualification imposed in another jurisdiction.

Another example is the Department sponsoring a number of regional Federal/State work groups which work together to design and share methods of fighting fraud, waste, and abuse. Conferences and newsletters are two other methods utilized by the Department and these groups to disseminate fraud prevention and error reduction information and methodologies such as front-end screening and verification.

The Department is also encouraging States to sign up to participate in the Federal Tax Refund Offset Program (FTROP). Under this pilot program States may collect FSP claims through an offset by the Internal Revenue Service of a Federal tax refund. The Department is working on regulations to make this program a permanent part of the FSP.

Finally, the Department is currently drafting proposed regulations to facilitate the administrative disqualification hearing process by making it more cost effective and less burdensome to State agencies. We believe all this Federal activity helps State agencies to fight recipient fraud and to recover overissuances due to recipient fraud.

Question. How much are states spending on "quality control" efforts to identify erroneous food stamp benefits? To what extent are states devoting staff resources to "corrective actions" to reduce the degree of erroneous payments?

Answer. FSP requires States to review a sample of cases in their jurisdictions to determine the levels of error applicable to both over and under payments. In fiscal year 1994 State agencies spent \$42.8 million in State and Federal funds to perform quality control activities. These activities included case reviews which were conducted in a sample of cases to determine whether the household was eligible and, if eligible, whether the household received the correct allotment.

In addition, State agencies take corrective action to reduce and prevent overpayments before they occur. These actions include utilizing special review teams to identify and solve errors in error prone cases, expanded training for certification workers, and anti-fraud activities such as pre-certification investigations by investigators in suspicious cases. While we know State agencies are doing these activities, FCS does not have data to quantify the staff resources devoted to error reduction. In addition, under the terms of the January 19, 1993, settlement agreement for fiscal years 1986-1991 Food Stamp Quality Control liabilities, States agreed to invest approximately \$45 million into payment accuracy improvements over a five year period. The settlement of these liabilities provides States with additional resources for improving payment accuracy and improved administration of the FSP.

Question. How much are states spending to pursue collection of overpayments and penalties for fraud? How does this compare to actual collections?

Answer. In fiscal year 1994, States spent \$164.7 million in Federal and State funds on anti-fraud activity. The State's share of the anti-fraud expenditure was \$64.0 million. The anti-fraud cost includes costs for investigations prior to certification to prevent fraud as well as investigations after certification to detect fraud, prosecutions and disqualification activity, and claims activity to recover overissuances due to fraud. We believe only a small portion of the \$164.7 million in Federal and State anti-fraud expenditures would be devoted by State agencies to establishing and collecting fraud claims. No estimate is available for the cost of collection activity for other types of recipient claims collections.

In fiscal year 1994, fraud claim collections were \$44.4 million. This does not include collections stemming from investigations in which no fraud was found but an inadvertent household error was found. In addition there would be the benefit savings from disqualifications

stemming from an intentional program violation and from appropriately denying benefits to people who lied about their circumstances on their applications and, if the misrepresentation was not discovered, may have qualified for participation. Total claim collections in fiscal year 1994, including claims due to fraud, inadvertent household error, and State agency error, were \$148.1 million.

ELECTRONIC BENEFIT TRANSFER (EBT)

Question. How does Invitation for Expressions of Interest (IEI) foster free and open competition in procurement policy when it limits those who can bid to only financial institutions?

Answer. While the IEI only allows financial institutions to be the primary bidders, non-financial institutions are able to participate in the process by partnering with financial institutions. Treasury envisions that, in most cases, banks will provide the package of services specified in the IEI using a variety of sub-contractors, including processors and terminal providers.

Question. Since EBT projects involve more than pure banking or depository functions, how is the use of IEI appropriate for large scale automated information systems and the attendant project management functions? Why is the Administration excluding those entities with the experience in these projects from being prime contractors in EBT?

Answer. Treasury determined that the IEI process was an appropriate way to acquire EBT services. However, this determination is currently being tested in the courts and we are advised by counsel not to comment specifically on the merits of the case.

Question. Given the significant change the IEI process and the Federal Benefit Security Program would entail from current procedures in the state administration of the programs, why haven't you notified the Congressional authorizing committees of the changes you are proposing?

Answer. While the IEI process and Federal Benefit Security Program include some changes to the administration of benefit delivery, both have been widely communicated and discussed -- starting with the Vice President's 1994 report, Creating a Benefit Delivery System that Works Better and Costs Less, and including numerous meetings with congressional staff. Perhaps most importantly, FCS has consistently instructed the Federal EBT Task Force to comply with existing FSP law and regulations or acknowledge their authority and then to make changes to some, if necessary. Finally, States retain the authority to choose EBT or paper benefit delivery, and they decide whether or not to work with

Treasury in using the IEI as a vehicle for obtaining EBT services.

Question. When changes of this magnitude are being considered the federal government adheres to the Administrative Procedures Act (APA) and publishes a proposed rule asking for public comment, undertakes a comment analysis and then formulates a final rule. If national operating standards and procedures are being considered why is the federal government not following the APA and seeking formal public comment prior to making such changes?

Answer. What final operating standards will look like and how any such National operating standards and procedures will be handled is still under consideration and has yet to be determined. That said, such operating rules will be developed with private sector input. The application of the Administrative Procedures Act (APA) affects the imposition of operating rules in two ways. First, if operating rules conflict with existing Program rules, changes in the Program rules would have to be made and these changes would have to be made using APA required notice and comment procedures.

Secondly, if the use of operating rules is mandated (and a decision has not been reached on this), the manner in which they are mandated would have to comport with the APA.

We are actively discussing various alternatives with the U.S. Treasury, the Interagency EBT Task Force, and other Federal agencies.

Question. Not all states may wish to relinquish their contracting role for projects in their state to Treasury's IEI process and have it taken over by the federal government. How will these states preferences be accommodated in Treasury's plan?

Answer. The Federal government supports two converging paths for States to use in order to achieve the goal of Nationwide EBT: the Joint-Venture Prototype or IEI approach and the State-Initiated or RFP approach. By supporting two paths, the Federal government is allowing States the opportunity to determine the most appropriate strategy for their individual State needs.

Under the IEI, Treasury would enter into an umbrella agreement with the selected financial institution; however, each State would also enter into their own direct contract with that financial institution, including the State's own terms and conditions. The State-initiated alternative recognizes that some States may want the increased autonomy and flexibility of separate procurement actions to acquire EBT services.

Question. Given that the federal government has considerably streamlined the approval process for procuring EBT services, how does IEI speed up the procedure for a state to get an EBT contractor?

Answer. The Federal government has streamlined the approval process for State deliverables. The streamlining benefits all States, regardless of their chosen procurement method. The IEI procedure, however, will hopefully allow a State or group of States to select a financial institution from a schedule of financial institutions pre-approved by the Treasury Department. If State procurement laws permit, choosing a vendor "off-the-shelf" may be even quicker than the current streamlined process, since the State may not have to go through a lengthy procurement procedure to select a vendor. We do, however, caution States that even making a selection off a list requires some level of analysis and planning that will take time.

Question. Given that the IEI process is intended for the federal government to obtain the service of a financial institution for receiving federal monies for a direct federal program or benefits and usually not for developing a large scale state human services project, is it being suggested that if IEI is appropriate for EBT development projects that it could be used for other automated information systems that receive federal benefits such as FAMIS, child support child welfare, Medicaid, etc.?

Answer. Treasury made an analysis of the services needed for the electronic delivery of government benefits through the movement of Federal monies and concluded that the IEI was a suitable acquisition method. In order for other projects to meet such a test, it would be necessary for Treasury to find they had similar substantial interests in the work under consideration. At this time, there are no other plans that we know of to use the IEI for other projects. FAMIS systems would be an unlikely candidate because they do not deliver benefits and move funds but rather maintain information about recipients, their resources and income, and other characteristics needed to determine their eligibility for State administered programs.

QUESTIONS SUBMITTED BY SENATOR KERREY

FOOD AND NUTRITION PROGRAMS

Question. I recently established a Nebraska task force to provide recommendations on ways to improve the food and nutrition programs. Their major recommendation was to combine the food and nutrition programs and move them into the Department of Health and Human Services, where the goals are much more consistent with health and

education then they are with the farm program. What is your reaction to such a suggestion?

Answer. I would disagree with the recommendation you describe. Congress recognized the Department's leadership role in nutrition when it finalized its plan to reorganize the Department last year. The reorganization elevated the Assistant Secretary for Food and Consumer Services to Under Secretary for Food, Nutrition, and Consumer Services.

As the lead Federal nutrition agency, USDA serves a dual mission through its nutrition programs: improving the Nation's health by getting food to people who need it, and strengthening our agricultural economy. By linking America's agricultural abundance to the health and well-being of millions, nutrition programs form a bridge between agriculture and health.

This nutrition link is based on our understanding of how plentiful and nutritious diet results in improved health. The original mission of USDA's programs was to achieve specific health outcomes by preventing hunger and promoting good nutrition -- and they have been strikingly successful in meeting that mission. Since the Nationwide expansion of the Food Stamp Program and WIC, the gap between the diets of low-income and other American households has narrowed.

Food and nutrition programs have also improved the health of the Nation's children. The incidence of growth stunting has decreased by nearly 65 percent in the last twenty years; the prevalence of low birthweight babies dropped dramatically over the last twenty-five years; and the prevalence of iron-deficiency anemia in low-income preschoolers has dropped significantly since 1980. Every dollar spent on WIC results in between \$1.77 and \$3.13 in Medicaid savings for newborns and their mothers. WIC serves as a gateway to health by bringing women, infants and children into public health clinics and thus improving their chances of getting regular immunizations and other health care.

These are important achievements, and they result from the Department's recognition of the critical link between nutrition and health. Our food and nutrition programs are far from simply agricultural or income support programs. By providing targeted food benefits, and using science-based nutrition standards, they protect the health and well-being of low-income Americans. While the Department is committed to streamlining and consolidation wherever consistent with our nutrition mission, simply combining the programs could make ensuring access to a healthful, nutritious diet, especially those with special needs such infants and children, far more difficult.

Furthermore, food assistance programs provide a unique mechanism through which to deliver effective nutrition

education to the public. USDA is developing effective education strategies to give our program participants the knowledge they need to lead healthier lives.

Two new initiatives are transforming USDA nutrition programs. First, our School Meals Initiative for Healthy Children is the first program-wide reform in the National School Lunch Program since it was established almost 50 years ago. This reform will ensure that school meals meet the standards of the Dietary Guidelines for Americans so children will have healthier meals at school. Second, we have recently established a Center for Nutrition Policy and Promotion at USDA. The Center will serve as a focal point for linking scientific research to the nutritional needs of the American consumer, and will play a role in ensuring a consistent nutrition education message across all nutrition assistance programs.

In sum, USDA's nutrition responsibilities appropriately reflect the critical link between a strong agricultural economy, and good health for all Americans. This Administration is committed to building on our nutrition successes to continue to promote health based on the latest science, while improving program administration and increasing State flexibility. Moving these programs to another Department would be a step in the wrong direction.

SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC)

Question. It is my understanding that in the WIC program, States are allowed some flexibility in establishing income and nutritional risk eligibility criteria, tailoring food packages, and determining channels of benefits delivery. Some State WIC Directors, proclaim that more uniformity nationwide would lead to improved quality and efficiency. Do you agree? Are there other ways to streamline the administrative requirements of WIC and reduce state administrative expenses which now comprise 25% of the total funding for the program?

Answer. The current amount of flexibility provided to States in the management of the WIC program allows for each State to operate the program within the framework of Federal guidelines and standards, but also allows States to address specific State needs and requirements. We do agree that National standards improve the level of quality and efficiency within the Program and feel it is imperative that the National requirements remain; however, we believe that the amount of flexibility currently provided to States has also allowed for creativity to resolve complex issues regarding funding limitations, cost containment initiatives, tailoring of food packages, and preferred method of benefits delivery.

The WIC program has a long-standing track record for supporting and rewarding high quality, efficient operations. One of the main reasons that the WIC program has historically been successful in achieving its desired outcomes with limited funds is that its rules for program operations, measuring performance, allocation, and accountability of funds are all geared toward ensuring that the activities needed to achieve such results occur. States are simply provided some flexibility for operating within these rules.

For fiscal year 1993, States reported that nutrition services and administration (NSA) expenditures represented 25.06 percent of total (food and NSA) expenditures for the program. However, only 9.58 percent of total expenditures supported general administration costs. The remainder of NSA expenditures (15.48 percent of total expenditures) supported nutrition education, breastfeeding promotion and support, and other client services such as diet and health assessments, issuance of food instruments/explanation of proper use, and referral services for other health and social services. These services are part of WIC benefits and are really not characterized correctly as administrative expenses. Nonetheless, we continue to review program operations to determine additional ways to reduce administrative requirements.

FOOD STAMP PROGRAM

Question. In FY 1994, Food and Consumer Services provided enhanced administrative funding to six State agencies (Alaska, Hawaii, Kentucky, Rhode Island, South Dakota, and Virgin Islands) based on their improved error rate performance in FY 1993. What did we learn about improving error rates from these states?

Answer. Enhanced administrative funding based on error rate performance is paid to States with combined payment error rates less than 6.0 percent, and, negative case error rates less than the National average negative error rate for the prior fiscal year. These funds are provided as an incentive for States to reduce and maintain low error rates. Most States receiving enhanced funding for fiscal year 1993 also qualified for enhanced funding in other years; Alaska was the only State among these six that qualified for enhanced funding for the first time.

While there is no single solution for reducing error rates, successful States are generally committed to error reduction at the highest level and demonstrate this commitment through specific actions at all levels of operation. The six States that received enhanced funding for fiscal year 1993 employ some specific activities which may have helped lower or maintain already low payment accuracy levels. These include the following:

- o Statewide corrective action committees comprised of top level management and program staff;
- o Review, analysis, correction and training on each error;
- o Strong client education programs dealing with rights and responsibilities incorporating videos, public service announcements and other media strategies;
- o Implementation of time and work saving procedures wherever possible to maximize staff efficiency;
- o Refresher training for veteran workers and well-structured and effective training for new workers.

Question. EBT is being promoted as the solution to the Food Stamp Program fraud and abuse problems. However, this technique may not fully address all of the fraud and abuse in the system especially in the area of street trafficking. Can you describe the experience of the States who have implemented EBT. What have been the improvements, and what are the problems? What other strategies have been implemented or are being considered to reduce fraud and abuse?

Answer. While EBT does not eliminate fraud, it hinders and prevents some of the types of fraud we see occurring in the paper coupon system. Since trafficking is a collusion between stores and recipients, it is impossible to prevent. However, experience in operating States has shown that EBT is a great boon to fraud detection and pursuit. States currently rolling out EBT are highly enthusiastic about the benefits it offers as a management tool for fraud.

EBT improves our ability to identify both store and household trafficking patterns, provides evidence against both, and helps us focus our investigatory resources. It provides data on every transaction and is used to target store investigative work, both for the FCS and the OIG. As an example, the FCS Mid-Atlantic Regional Office has been able to use transaction data available in New Jersey and Maryland to effectively identify traffickers. In New Jersey alone, more than 50 potential retailer traffickers have been identified and referred for further investigation. In addition, the region has used solely EBT data to successfully disqualify stores in both States. In turn, the region has referred a list of the trafficking clients back to the appropriate State agencies.

Street trafficking is also more difficult to disguise in EBT. While cards and PINs can be "traded" like

coupons, excessive card replacements can trigger investigations since EBT allows us to track this. Operating sites have already been able to use the data to identify such abuses.

We plan to examine store transaction data for all systems regularly. By January 1996, FCS intends to have a National system in place to routinely process EBT transaction data and produce exception reports of suspicious stores for investigation and follow-up. When traditional tips are offered, we can use the system to find detailed information on the store's transactions and look for suspicious patterns. We expect to see patterns emerge for most abuses.

One of the problems encountered with EBT is that it discloses trafficking so clearly. While trafficking existed in the paper coupon world, it was not easy to discern. Where it was found, disqualification work was usually confined only to the store involved in trafficking; paper coupon information did not show the recipient involved. States had almost no recipient trafficking cases because there was no evidence unless a store clerk gave testimony. Now however, EBT can actually overwhelm a State with recipient disqualification work.

Besides trafficking, EBT can be used abusively by stores, clerks, and recipients in other ways to take funds from each other. Stores could debit more than the actual purchase amounts; clerks could refund amounts into cardholder accounts thus stealing from the store owner; recipients could complete paper vouchers at "non-traditional" stores without point-of-sale equipment knowing they have an insufficient balance to cover the purchase. Recipients and stores have responsibilities to protect their cards, PINS and passwords and to follow correct procedures or abuses may occur. We are working aggressively to find techniques to prevent and/or detect these fraudulent actions. We will be building on efforts already underway in Maryland, New Jersey, South Carolina and other States by systematically documenting techniques, procedures, costs and outcomes with regard to fraud detection and prevention.

Question. The national overpayment error rate fell steadily from 1984 from 8.6 percent through FY 91 to 7.0 percent. It then rose by over one percentage point to FY 1992, and is now around about 8.3 percent. An additional \$79M over FY95 is requested in the budget, but the overpayment error rate is predicted to remain unchanged. What type of improvement strategies are currently in place or are being considered so that we eventually see a reduction in this overpayment error rate?

Answer. Payment accuracy is a top priority for the Department. The Department is currently executing a major payment accuracy initiative designed to

aggressively work with States to reduce the amount of benefits issued in error each year. This initiative identifies specific actions to be undertaken at all levels of responsibility and underscores the need for increased commitment for dealing with the problem of payment accuracy and achieving a reduction in the error rate during fiscal year 1995.

A key component of this initiative is working in partnership with States to address the underlying causes of excessive errors in the program. The following is a summary of payment accuracy activities planned, underway or already completed:

- FCS has created an error reduction core team at headquarters to work exclusively on the development and coordination of payment accuracy issues.
- Each State has been asked to contribute to a significant reduction in the National error rate for fiscal year 1995, and has been assisted by FCS regional offices in developing strategies for reaching these targets.
- FCS held a high level National conference in November 1994 on the issue of payment accuracy which brought together State welfare commissioners and Federal staff to discuss the problem, its effects on the Food Stamp Program, and the need for renewed commitment to effective management at all levels of responsibility.
- FCS earmarked \$1 million from the fiscal year 1995 budget to support the above error reduction activities.
- Increased funding has been provided to FCS regional offices for the State Exchange project. State Exchange provides funds to support travel among State agencies to allow for the observation of successful payment accuracy efforts.
- FCS will shortly begin publication and distribution of a National payment accuracy report, incorporating contributions from individual States which exemplify best practices and strategies.
- FCS has also been working with State representatives to develop legislative proposals that would provide greater financial incentives to States that successfully reduce error rates.

In addition, the Department has proposed legislative changes that could further improve payment accuracy. In its recommendations for the 1995 Farm Bill, the Administration has proposed to replace the current Quality Control System with a new Payment Accuracy System. It is critical to couple efforts to expand State flexibility with a workable, performance-based monitoring system that holds States accountable for payment accuracy. The new Payment Accuracy System will give States a larger stake in making accurate determinations of eligibility and benefits and strike a better balance between rewards and sanctions for performance. USDA seeks authority to:

- o More effectively target sanctions on States with the highest error rates, focusing on those with error rates more than one percentage point above the National average and stiffen the requirements for payment. Other features of the current calculations of State liabilities should be retained.
- o Provide real incentives to States to reduce error rates by improving the current system of enhanced funding. The initial phase (covering performance in fiscal years 1996 and 1997), would reward States that reduce their error rates by allowing them to retain 25 percent of the savings gained when food stamp error rates fall; the subsequent phase (starting with performance in fiscal year 1998) would reward States that maintain low error rates. The total value of incentives paid out could not exceed \$100 million in any one year. These special incentives would be eliminated after five years except for States with error rates below 6 percent.
- o Credit effective State efforts to collect claims for overissuances. This would reduce a State's liability by a portion of the value of claims collected and returned to the Federal government.
- o Hold States harmless for 6 months for errors made during the conversion to a new computer system.
- o Complete all arbitration requests and announce final error rates by June 30 of the following year.
- o Exclude the established and extensively reviewed statistical methodology for calculating error rates as a basis for appeals of State liabilities for high error rates.

- o Strengthen the existing penalty system by requiring States to begin payments on their liabilities within 90 days; the Secretary may defer substantial payments for up to 12 months if State legislative action is needed; payments would be made quarterly over 30 months.

This proposal will allow States to reinvest a portion of the savings realized as error rates fall, supporting continued program improvements. It will also stiffen the requirements for payments from States with high error rates. This combination -- rewards for improved payment accuracy and real sanctions for high error rates coupled with investment in program improvement -- will augment existing incentives for States to reduce errors, reducing Federal costs and saving taxpayer dollars.

Question. In the current 1995 food stamp program, coupons costs are budgeted at \$46.7M for printing, \$5.3M for shipping and \$24.2M for processing redeemed stamps. Convincing arguments suggest EBT would reduce food stamp program costs because of the reduction in coupon production and redemption. What costs are associated with the installation and implementation of an EBT system nationwide?

Answer. In the Federal Electronic Benefits Transfer Task Force's report to the Vice President, Creating a Benefit Delivery System that Works Better and Costs Less, start-up costs for a multi-program, Nationwide EBT system are estimated at \$223.7 million over the five year period from fiscal years 1995 through 1999. Using the assumptions of the EBT Task Force, the Federal investment for the design, development and implementation of Nationwide EBT is expected to require \$83 million in new appropriations over four years -- including funds already received in fiscal years 1994 and 1995.

QUESTIONS SUBMITTED BY SENATOR KOHL

FOOD STAMP PROGRAM

Question. In their package of budget-cutting proposals, the bipartisan Concord Coalition proposed that food stamp benefits below \$10 per recipient per month should be eliminated. It would seem to me that it would cost more than \$10 just to process such small benefits each month. I am curious how many food stamp recipients there are in this category, and how much money we would save by eliminating benefits under \$10.

Answer. Very few households qualify for less than \$10 per month. Eligible households of one or two persons are guaranteed a minimum benefit of \$10 per month. Only households of size three that have monthly net income near the net income eligibility standards can qualify for and receive benefits that are less than \$10 per month.

Larger households that meet the eligibility criteria qualify for benefits larger than \$10.

A significantly larger group are the households of one and two persons that are guaranteed a minimum benefit of \$10. An estimated 450,000 people living in nearly 400,000 households qualify for less than \$10 in benefits but actually receive the minimum. Eliminating benefits for these households would save about \$50 million in fiscal year 1996.

NUTRITION STANDARDS

Question. According to the Center on Hunger, Poverty and Nutrition Policy and Tufts University, millions of American children receive seriously deficient dietary intakes relative to their families' income. Poor kids receive less than 70 percent of recommended dietary intake standards set by the National Academy of Sciences. Even though kids may qualify for federal nutrition assistance with a uniform nutrition standard, they may still be undernourished.

The House welfare bill allows states to set and follow their own nutrition standards. By allowing 50 different standards, what do you expect will result? Will overall nutrition in this country improve or worsen?

Answer. While food and nutrition programs must be made more flexible and easier for States to administer, Federal standards have helped to ensure that many of these programs work. The changes you describe could jeopardize the health of the children and families our programs serve.

The elements of a healthy diet do not vary across the country. The Dietary Guidelines for Americans established by USDA and the Department of Health and Human Services and the Recommended Daily Allowances put forth by the Food and Nutrition Board of the National Research Council are the same throughout the country. Although the costs and types of foods available may vary across the country, the basic requirements of a healthy, nutritious diet for food assistance program participants are the same regardless of where they live.

While States may be capable of developing their own nutrition standards, it would be inefficient for them to reinvent the wheel 50 times in 50 States. Furthermore, even in States with the best intentions, the funding limits imposed by the House plan will make it difficult for States to maintain nutrition standards on their own. This will result in the unraveling of the National nutrition framework that has successfully narrowed the gap between the diets of low-income and other families.

The experience of the Aid to Families with Dependent Children (AFDC) Program is instructive here. Each State

establishes their own AFDC need standard (the income the State decides is essential for minimum basic consumption) and AFDC payment standard. Over time, States have paid a smaller and smaller percentage of the need standard, at least in part because of increasing fiscal pressure on State budgets. From 1970 to 1994, the median State's payment standard fell from 79 percent of the need standard to 63 percent.

President Clinton has said that USDA's food and nutrition assistance programs are in the National interest and should remain a Federal responsibility. National nutrition standards that promote nutrition and protect health are one of the most important reasons for keeping that responsibility at the Federal level.

CONCLUSION OF HEARINGS

Senator COCHRAN. This concludes our regularly scheduled departmental hearings. We may have reason to call other hearings before we write the bill. The subcommittee will stand in recess subject to the call of the Chair.

Ms. HAAS. Thank you.

[Whereupon, at 11:50 a.m., Wednesday, May 10, the hearings were concluded and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1996

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

MATERIAL SUBMITTED BY AGENCIES NOT APPEARING FOR FORMAL HEARINGS

[CLERK'S NOTE.—The following agencies of the Department of Agriculture did not appear before the subcommittee this year. Chairman Cochran requested these agencies to submit testimony in support of their fiscal year 1996 budget request. Those statements follow:]

NATIONAL APPEALS DIVISION

PREPARED STATEMENT OF FREDERICK YOUNG, ACTING DIRECTOR

Mr. Chairman and members of the Subcommittee, I am pleased to appear before you to discuss the fiscal year 1996 budget request for the Department of Agriculture's National Appeals Division (NAD).

REORGANIZATION

NAD was recently established by the Department of Agriculture Reorganization Act of 1994, Public Law 103-354. The law requires the consolidation of the administrative appeals functions and staffs of the former Agricultural Stabilization and Conservation Service, Farmers Home Administration (FmHA), Federal Crop Insurance Corporation, and Soil Conservation Service. NAD is an organization that is independent of all mission areas in USDA and that falls directly under the auspices of the Secretary as part of Executive Operations.

A single appeals staff will provide benefits to both the public and the Government. For example, a single appeal can now be held for a farmer who is

appealing both a loan denial and a crop insurance issue, thereby, reducing costs for both the farmer and the Government. Also, by removing the appeals function from the agencies making the program decisions, the Department is removing conflict of interest problems, whether they are real or perceived. And finally, a single appeals staff for USDA will improve the uniformity and consistency of decisions within the Department.

In addition to headquarters staff in Washington, D.C., NAD has 3 area offices in Indianapolis, Indiana; Memphis, Tennessee; and Golden, Colorado, and 65 field offices located in 36 States. These area and field offices were part of the FmHA's National Appeals Staff prior to the reorganization and are not co-located with other USDA offices. There is no co-location because the former FmHA National Appeals Staff always strived to maintain independence and avoid any appearance of conflict of interest. NAD intends to continue with that philosophy.

MISSION

Our mission is to conduct impartial administrative appeal hearings and reviews of adverse program decisions made by officers, employees or committees of designated agencies of the Department of Agriculture. At this time, we are handling appeals from the Natural Resources Conservation Service (NRCS), Consolidated Farm Service Agency (CFSA), Rural Utilities Service (RUS), Rural Housing and Community Development Service (RHCDS), and Rural Business and Cooperative Development Service (RBCDS). Appeal hearings can be requested by USDA program participants and appeal reviews can be requested either by the program participants or the agency that issued the adverse decision. Under the law, a participant who has been issued an adverse decision has the right to a face-to-face hearing in the appellant's State of residence within 45 days after requesting a hearing. A decision rendered during a hearing is based upon the evidence presented at the hearing. NAD

will seek to assure that program participants' due process rights are preserved throughout the appeals process.

CURRENT ACTIVITIES

Currently we are vigorously attending to the administrative details of consolidating the appeals staffs from the four former agencies into one cohesive unit. We have held initial 4-day training sessions for all Hearing and Review Officers, cross-training them in the various mission area programs. We are working with the Department's Office of Operations to find office space to consolidate the NAD headquarters staff in one location. In addition, we are enhancing our computer tracking system and working with the Department's Office of Personnel to get our organization's delegation of authorities approved.

We are, nevertheless, already carrying out our mission of providing appeal hearings and reviews in accordance with the authorizing legislation. The field Hearing Officers are now hearing cases and the Review Officers are reviewing cases from the various agencies instead of from just one agency.

FISCAL YEAR 1996 BUDGET REQUEST

There was no fiscal year 1995 appropriation for NAD. Funds for fiscal year 1995 were transferred from RHCDS, CFSA, and NRCS, pursuant to Secretary's Memorandum No. 1010-1, dated October 20, 1994.

The National Appeals Division is requesting \$12,166,000 for fiscal year 1996. This represents, on a comparable basis, an increase of \$320,000, or 2.7 percent over the fiscal year 1995 transfers of \$11,846,000.

The work of NAD is labor intensive. As such, three-fourths of our requested increase covers the cost of staff on board. Of the \$284,000 requested, \$21,000 is for annualization of fiscal year 1995 pay costs, \$142,000 for the anticipated pay raise for fiscal year 1996, \$31,000 for one extra day's pay in fiscal year 1996 and \$90,000 for salary adjustments. The remaining \$36,000 includes an increase of \$99,000 in non-salary operating costs offset

by a decrease of \$63,000 in support of the President's Executive Order to reduce overhead-type costs.

This concludes my statement, Mr. Chairman. I will be pleased to respond to any questions.

OFFICE OF THE CHIEF FINANCIAL OFFICER
PREPARED STATEMENT OF ANTHONY A. WILLIAMS, CHIEF FINANCIAL
OFFICER

Mr. Chairman and members of the Subcommittee, I am honored to appear before you today as the Department of Agriculture's first separately situated Chief Financial Officer (CFO) nominated by the President and confirmed by the Senate in November 1993. With me today are Irwin T. David, the Department's Deputy Chief Financial Officer, and Constance Gillam, my budget officer.

I would like to share with you how USDA is positively and affirmatively moving to a model where Government financial management is the foundation for a bridge to the "USDA beyond 2000," an organization driven by markets, customers, costs, and results. I would also like to discuss briefly our appropriation request, and the Department's Working Capital Fund, with special emphasis on the National Finance Center.

FINANCIAL MANAGEMENT

As you know, USDA is the fourth largest Federal agency in terms of its budget and, as a financial institution, has a portfolio as large as Citibank and Bank of America. With annual outlays of about \$62 billion and responsibility for nearly \$144 billion in assets, USDA is a big business operation. USDA has a responsibility to use its assets efficiently and effectively--in private sector terms, maximize the taxpayers' return on their investment in USDA. Instituting

a sound financial management program is critical to meeting this responsibility.

The Clinton Administration believes that sound financial management is pivotal and critical to the successful transformation of Government. Like the private sector, USDA is working on reinventing, reorganizing, restructuring, rightsizing, reengineering, and reforming itself to create a Department that works better and costs less. Our mission in the CFO organization is to provide the financial management leadership and service required to support USDA's transformation and to maintain quality program delivery. As such, our organization provides policy, guidance, tools, information, and oversight for program managers, guiding them to higher quality decisions that lead to the better management of resources.

The concept of working together in partnerships with USDA mission and operating agencies is central to the CFO organization. As I stated last year to this committee, our mission is to:

Through partnerships, provide financial management leadership and service to support quality program delivery by TEAM USDA.

To support our mission and its associated vision and guiding principles, we have set eight goals to achieving better financial management:

- 1. Integrate financial management with program management; provide timely, reliable and useful financial management information, advice and counsel to support informed decision making.**

2. Ensure adequate internal controls to safeguard assets and manage liabilities, revenues and expenditures.

3. Foster accountability for financial management performance throughout USDA.

4. Lead the effort to implement strategic planning and performance measures in USDA.

5. Promote career development opportunities in a supportive work environment to maintain a productive, quality-oriented financial management workforce.

6. Establish a strong, results-oriented, highly effective and professional financial community within USDA.

7. Develop and maintain financial management information systems that are responsive to user and customer needs.

8. Provide high quality customer service.

The Office of the Chief Financial Officer's (OCFO) selected **accomplishments** since last year are:

1. The Department is considering lifting the moratorium for new cross servicing work at the OCFO/National Finance Center (NFC) in fiscal year 1995. We have prepared the groundwork for resuming cross-servicing activities at the NFC. Congress continues to be a strong proponent of

OCFO/NFC's cross-servicing and to direct agencies to us. The OCFO/NFC's cross-servicing makes good business sense. The Report of the National Performance Review and the Government Management Reform Act of 1994 emphasize "franchising" as a creative and effective way to create a smaller, more efficient government. By franchising USDA services to other Federal agencies, we reduce the costs of USDA and overall government operations. To assure our obligations to our current customers are met, we will only take on new customers if they will not delay our planned modernization activities and if we are able to increase staffing to support the additional workload.

2. The OCFO, with Department-wide "buy-in" and support of mission agencies, is developing a single, integrated financial information system through implementation of the Financial Information Systems Vision and Strategy (FISVIS) project. By reinventing the Department's financial information systems, we can not only provide more timely, accurate, consistent, reliable, and useful information to program managers, but also significantly reduce the cost of collecting, processing, and providing information. Starting October 1, 1995, FISVIS will begin to replace existing financial information systems that in many cases are over 20 years old. The new system will be the foundation for all other financial and related systems in the Department.

We recently awarded a contract for a project that when completed will allow us to customize and install commercial off-the-shelf software, and significantly reduce implementation time and cost. The excellent partnership that has developed between the OCFO and USDA's operating agencies ensures successful implementation of the software.

3. **The FISVIS project, working with program agencies, developed a single "language" for financial information in USDA and produced the first USDA-wide "Financial and Accounting Standards Manual" and "Financial Management Information Architecture."** These documents provide: (1) a uniform set of standard accounting definitions; (2) a chart of accounts; and (3) a USDA-wide standard general ledger. Now, for example, instead of having 175 definitions of "accounting code 1010," there is one -- the "Agency's Fund Balance with the Treasury."

4. **The OCFO is implementing cost accounting and cost management processes.** A cost management pilot project we conducted with a major USDA Agency demonstrates the power of these techniques on one of their internal operating procedures processes. Preliminary results of this single pilot identified overlapping and duplicative processes, with substantial potential cost avoidance. By implementing cost management and reengineering techniques Department-wide we can not only realize significant savings but also really move to a USDA that works better and costs less.

5. **The OCFO coordinates the implementation of the Government Performance and Results Act of 1993 (GPRA) in USDA.** USDA has eight performance measure pilot programs. The OCFO is moving forward vigorously in assisting agencies to develop strategic and performance measures.

6. **USDA made maximum use of electronic mechanisms in collecting \$20 billion and disbursing \$18 billion.** We use the most cost effective and efficient methods to collect money owed us and to pay amounts we owe. We use state-of-the-art, reliable, and efficient payment and collection mechanisms. These mechanisms provide better protection for the assets

entrusted to us, reduce agency and central administrative costs, free-up personnel to work on other priorities, and reduce interest costs.

7. The deficiencies in our process of providing information and in our systems of internal controls, as highlighted in the Office of the Inspector General's audits of our Consolidated Financial Statements, are being aggressively addressed by the OCFO and the relevant USDA agencies. For fiscal year 1993, the Department received what is called a "qualified" opinion on its Consolidated Financial Statements. While this is an improvement over the fiscal year 1992 audits, I view this as unsatisfactory. I am committed to achieving an unqualified opinion.

8. In June 1994, in support of our goal to establish a strong, results-oriented, highly effective and professional financial community within USDA, we hosted a Financial Management Forum. Organized around the OCFO's message that "financial management is everyone's responsibility" this USDA-wide Forum was broadcast live by satellite and televised around the country to provide USDA field as well as headquarters financial and program management personnel an opportunity to hear and interact with top administration officials, lawmakers, and USDA's top financial officials. Immediately following the Forum, we sponsored a USDA-wide Financial Management Retreat, where the financial management leadership of the Department and component agencies sketched a strategic vision to achieve coordinated financial systems plans and budgets, high quality financial information, and services at lower costs.

The OCFO's leadership, vision, guidance, and reinvention activities are dramatically changing and improving the way that the Department conducts

business. It is imperative that financial management continues to be strengthened at USDA. However, to accomplish these objectives, more resources must be devoted to financial management.

Fiscal Year 1996 BUDGET REQUEST

To meet USDA's financial management challenge, we are requesting an increase of \$819,000 and eight staff years for the Office of the Chief Financial Officer. With the endorsement of this Committee, this increase would represent the first additional investment in USDA financial management since the CFO Act of 1990 and other legislation added significant responsibilities to financial management at the Department. The increase is comprised of \$84,000 to cover increased cost of staff on board; the remaining \$735,000 and eight staff years will be directed toward initiatives on audited financial statements, strategic and performance planning, financial information systems, and cost management.

Audited Financial Statements

Every business, State and local government, and tax-exempt organization in the United States has their financial statements audited by an independent auditor. This independent review provides management, stockholders, and other interested parties with an unbiased opinion of the quality (reasonableness) of the financial information provided to managers and outside interests and identifies weaknesses in underlying financial and other systems. The Federal Government, and USDA in particular, has not had until recently the benefit of an independent review of its financial reports and systems for the benefit of Congress, or of taxpayers.

This practice is changing. The CFO Act requires audited financial statements for selected pilot departments, including USDA. The Government Management and Reform Act of 1994 extends this requirement to all major Federal agencies and departments and requires an annual Government-wide financial statement audited by GAO. With an investment in good financial reporting, the OCFO can improve the rating of our financial statements, from the "qualified" rating we received for fiscal year 1993 -- itself an improvement over fiscal year 1992 -- to an unqualified opinion, which would be a certification that we redressed a number of deficiencies in our process of providing information and internal controls.

Strategic and Performance Planning

The OCFO provides leadership in developing performance measures under the Government Performance and Results Act of 1993 and the Chief Financial Officers Act of 1990. In fiscal year 1997 the former law requires all mission areas to submit performance goals and plans. By the spring of 1996, USDA intends to have strategic plans for each mission area, and to have performance measures for most appropriation accounts when the fiscal year 1998 budget is submitted. The OCFO also envisions a Farm Bill incorporating performance goals and measurable outcomes rather than detailed processes and procedures. After all, the Congress, the Administration, and the American public want results, not process. By including performance goals and measurable outcomes into the Farm Bill implementation, USDA will be able to show the taxpayer what they get for their tax dollars. We must know what our goals are, how we are going to accomplish them, and how to tell whether we succeeded. Thus, we need, and are developing, strategic and performance plans and performance measures. We are taking leadership, but we will need

additional resources to help train, support and guide the agencies in developing strategic and performance plans for the Department.

An investment in sustained strategic planning and performance measurement -- results management -- will return savings to the Department in terms of both elimination of unnecessary control systems and higher levels of achievement.

Financial Information Systems

USDA currently operates numerous non-integrated, inconsistent financial information systems. As a result, many USDA agencies maintain costly, duplicative records in order to provide for the reconciliation of financial activities at the end of each year. More important, these fragmented systems do not provide policy, program, management and operating staff with necessary financial information in a timely manner.

The Department and OCFO envision a single, integrated financial information system providing timely, accurate, consistent, reliable, and useful financial management information to policy and program officials, when and how they need it. Through the implementation of FISVIS, we can make this vision a reality. Systems developed by FISVIS will reduce operating costs of the Department's financial systems by shifting personnel resources from routine processing to more productive activities.

In addition, we have recently initiated another major financial systems activity -- which we are calling "FISVIS II" -- that extends financial modernization to component agencies. This new initiative will enable the OCFO to fulfill its responsibilities for Department-wide financial systems and eliminate redundant

agency systems. These current and future FISVIS activities will result in high-quality financial information for critical decision making as USDA agencies streamline their organizations and operations and implement the Farm Bill. However, in order to reinvent USDA's financial information systems, we need the financial and human resources to work with the mission agencies to help them achieve the benefits of these systems, to administer the standards, and to enable the Department to take advantage of the new financial systems,

Cost Management

The OCFO is developing and implementing cost accounting and activity-based costing systems widely used in the private sector in order to assist in performance measurements and to serve as the basis for reengineering and rightsizing efforts. The ability to determine the costs of an activity will enable USDA and decision-makers to identify where value is added or not added and to target appropriate areas for cost reduction. Managers, at all levels, need to be aware of total program costs and the value of program outcomes.

Through the use of cost management principles, our new financial information systems will allow USDA to reduce costs and improve services. Several current projects are demonstrating the effectiveness of these techniques, common in the private sector but new to the Government, to provide better information for improved decision making. The OCFO at USDA is leading the way toward developing cost management techniques for the Department.

In most cases, USDA and other Federal managers control inputs without adequate information to give full consideration of the costs and value of program outcomes. However, we face a serious situation: budgets are being reduced and program effectiveness is being questioned at every turn. Our

managers need better financial and management information to meet these challenges. We would like to apply cost accounting and cost management processes across the Department, especially in the area of fees, royalties, rents, and other charges. USDA currently collects over \$2.5 billion through various fee and charge programs. The lack of reliable and timely cost information affects the ability to determine and, where appropriate, charge and recover costs.

The impact of an investment in cost management is concrete and real: for instance, if we are underestimating the cost of "fee for service" activities by 2 percent, the Department revenue could increase some \$50 million. In order to achieve these savings, the OCFO asks for a commitment of resources to continue these pilot projects and expand them into a Department-wide cost management system.

WORKING CAPITAL FUND

Mr. Chairman, I would like to address our plans for activities supported by our Department's Working Capital Fund, or the Fund for short, in fiscal year 1996.

Background

Unlike appropriated activities, the Fund operates as a fee-for-service financing mechanism. A wide range of financial and administrative services -- payrolling employees, management of supplies and furniture, video production, computing and ADP services, and others -- are available to all of our USDA agencies and a number of non-USDA agencies as well. Agencies making use of goods and services reimburse the Fund for the cost of these goods and

services. Customers are charged only what the service costs; no funds are directly appropriated to the Fund for annual operations. Money has been appropriated to the Fund in the past -- the initial appropriation in fiscal year 1944 as well as appropriations in the late 1980's -- to improve the capital base. However, we seek no appropriation in fiscal year 1996. The amounts presented to you reflect our best estimate of what goods and services will cost, based on our best estimates of customers' service requirements. In this respect, we, working together with managers of the activities, try to manage our operations as businesses with an emphasis on customer service.

Fiscal Year 1996 Operations

In fiscal year 1996, the Fund will support 23 activities in three Department-level offices -- the Offices of: Assistant Secretary for Administration, Chief Financial Officer, and Communications. While most activities are headquartered here in Washington, most of our personnel -- almost 90 percent of total staff-years -- are in the field at our National Finance Center in New Orleans, Louisiana; our National Computer Centers in Kansas City, Missouri and Fort Collins, Colorado; and our Consolidated Forms and Publications Distribution Center in Landover, Maryland.

Mr. Chairman, our current estimate of fiscal year 1996 operating costs is approximately \$196 million, about three-quarters of one percent above the 1995 estimate. In addition planned capital acquisitions are estimated at \$19 million for fiscal year 1996.

Thrift Savings Plan Support

Of the total estimated operating costs in fiscal year 1996, \$25 million supports the record keeping and loan operations services provided to the Federal Employee Retirement System/Thrift Savings Plan. This estimate is 7 percent higher than the 1995 estimate, reflecting higher transaction volumes as more employees enroll in the Plan and more employees take advantage of the lending options offered under the Plan. Activity in this area more than accounts for the net increase in our fiscal year 1996 cost estimate. I hasten to point out that costs associated with support to the Thrift Savings Plan are not paid with Federal dollars, but from contributions to the Plan made by participants. A small portion of monies contributed to the Plan by participants goes to pay administrative costs, of which our services are a part.

Services to other non-USDA agencies will cost about \$50 million, down about one-half of one percent from the fiscal year 1995 estimate. In fiscal year 1996, USDA agencies' costs will be virtually unchanged from the current fiscal year 1995 estimate of \$121 million.

National Finance Center

All of our WCF services continue to show a sensitivity to unit costs. For example, last year I reported to the Committee that the cost of payrolling an employee in our payroll/personnel system at the National Finance Center -- our largest single service -- was \$111.74 in fiscal year 1989. In 1996, the cost will be \$102.30 -- 8.4 percent lower. The fiscal year 1996 unit cost figure -- \$102.30 -- is greater than the fiscal year 1995 estimate of \$98.71. However, the trend over time is unmistakable. Unit costs are being reduced. When the

moratorium on expansion of cross-servicing is lifted, we expect to see reductions in future unit costs.

At our National Finance Center, a five-year strategic plan has been developed that was built from the bottom up, focusing on future directions in the development of financial management products and services and deployment of financial services and operations to satisfy both our USDA and non-USDA customers.

Cross-Servicing Activity

Mr. Chairman, at a time when the Administration, the Congress, and this Committee have been in agreement on the urgent need to transform our Department into a more market-disciplined, customer-sensitive, and cost-based enterprise, the NFC has been operating under a moratorium on additional cross-servicing. In regard to the NFC in particular, this Committee specifically endorsed a resumption of cross-servicing by the NFC with all deliberate speed. One hears echoes of this call in both the Report of the National Performance Review and the Government Management and Reform Act of 1994.

We regard the NFC as an asset to the Department and to the financial management community -- a model of how we want managers to perform. There was a legitimate need to step back and reevaluate our systems. We have taken that step, and as I committed to this panel, we are considering new cross-servicing this year. We have met or have in place plans to meet, our obligations in modernizing systems, solving security problems, and addressing documentation issues. Equipped to face any competition thrown its way, the NFC is poised to lead Federal franchising into the next century.

Unit Costs in Other WCF Activities

This is part of a bigger story, one that shows just how effectively services supported by the WCF are performing. While total costs are going up slightly, the costs for our "core" services are actually being reduced and unit costs -- the true price for a unit of service -- are being reduced even further. For example, in mainframe computing services we expect to see a 6 percent drop in unit cost per computer processing unit minute from 1995 to 1996. We expect to see video production hourly costs cut by more than 7 percent from the 1993 level. We will see the cost to process a purchase order reduced by more than 4 percent between 1995 and 1996. Across the Fund, there are examples of effective management and cost reduction. The clear trend over the last 5 years has been a reduction in the prices our customers pay for a unit of service.

Developmental Activities Supported by the Fund

The Fund supports two ambitious developmental programs. We are leading one of the most significant efforts in systems modernization in the Department, the Financial Information Systems Vision and Strategy Project, or FISVIS. Under FISVIS, we are undertaking a redesign, standardization, and reengineering of financial systems across the Department. We are making progress towards having a financial information system that will be "user-friendly," that will allow agencies flexibility in managing finances according to their own needs, and that will provide both program and financial managers good and timely data. We will be doing this, in part, by updating many of the National Finance Center's automated applications systems that are outdated and inefficient by today's standards. This project represents, for the first time in the Department, a cooperative effort among all members of the financial management community -- at the Departmental and agency level -- to build a

financial information system to fulfill the Department's and the agencies' needs. This project offers great promise for an entirely new Department-wide way of thinking about financial management.

The second of these developmental projects, managed by my colleague, Wardell Townsend, is the Modernization of Administrative Processes project. From my perspective, I believe that the MAP project can and will successfully point the way to an entirely new, cost-effective, and efficient way of delivering administrative services to our customers.

We are proud of the performance of the Fund and its activities. We believe that our customers receive the highest value for their dollar when they use WCF services. We believe that the Fund is a fine example of administrative efficiency, the kind the President and the Congress are seeking to achieve and cost efficiency that the American people demand. This concludes my prepared remarks. I would be happy to answer any questions that you or the other members of the Committee might have.

OFFICE OF THE GENERAL COUNSEL

PREPARED STATEMENT OF JAMES S. GILLILAND, GENERAL COUNSEL

INTRODUCTION

Mr. Chairman and members of the Subcommittee, I am pleased to appear before you this afternoon to present an overview of the Office of the General Counsel and discuss with you the appropriation request for fiscal year 1996.

I am joined by Bonnie L. Luken, Deputy General Counsel, our senior Associate General Counsel, J. Michael Kelly, and Steve Dewhurst, the Department's Budget Director. Also accompanying me is William Perrelli, Director, Administration and Resource Management, and Charlene Buckner, our Finance and Budget Analyst.

MISSION OF THE AGENCY

The Office of the General Counsel (OGC) is responsible for providing legal advice and services to the Secretary of Agriculture and other officials of the Department of Agriculture with respect to all USDA programs, operations, and activities.

The mission of OGC is to determine legal policy, provide legal services, and direct the performance of all legal work for the Department throughout its Washington and field locations.

The General Counsel is the legal advisor to the Secretary of Agriculture and is responsible for providing all legal advice and representation that is required for the Department.

SIZE

As of September 30, 1994, OGC had 400 employees of which 391 were permanent full-time employees. There were 179 permanent full-time employees and 4 other employees located in Washington, D.C., and 212 permanent full-time employees and 5 other employees in the field. OGC's FY 1994 staffing consisted of approximately 274 attorneys and 126 support staff.

ORGANIZATION

OGC's services are provided through 11 Divisions in Washington, 22 field offices, 7 client host sites, and 1 special work site. The headquarters for OGC is located in Washington, D.C. The Office is directed by a General Counsel, a Deputy General Counsel, five Associate General Counsels, 11 Assistant General Counsels, and a Director for Administration and Resource Management. We have attached an organizational chart for your information that shows the overall structure of the office.

The headquarters legal staff is divided into five areas:

- (1) Natural Resources;
- (2) Rural Development;
- (3) International Affairs, Commodity Programs and Food Assistance Programs;

(4) Regulatory and Marketing; and (5) Legislation, Litigation, Research and Operations.

FIELD STRUCTURE

OGC has five regional offices, each headed by a Regional Attorney, and 17 branch offices. The locations of these offices are listed on the attached organizational chart. Currently, OGC has 9 employees working in the offices of client agencies, U.S. Attorneys, or in other locations. These sites, which we really do not consider separate offices, include Sacramento, California; Trenton, New Jersey; St. Paul, Minnesota; Stevens Point, Wisconsin; Gainesville, Florida; Indianapolis, Indiana; Boise, Idaho; and Greenwood, Mississippi.

OGC's field offices provide legal services at the field level. Much of the Department's caseload is handled at the field level directly with U.S. Attorneys. Primarily, legal services in the field focus on the lending and agricultural areas. We have also experienced exponential growth in natural resources litigation. Other Departmental agencies, including the Agricultural Marketing Service and the Food and Consumer Service, also receive legal services from OGC field offices.

STATUS OF FY 1995 FUNDS

In fiscal year 1995, Congress appropriated for OGC \$25,992,000, which is the same amount that was appropriated in fiscal year 1994. This appropriation has resulted in increasingly difficult austerity measures and a reduction in staff. The problem is that our personnel costs--without adding people--have increased the pressure on our budget faster than attrition and buyouts have relieved it. There have been no attorney recruitment programs including the summer internship program, which was cancelled because clerks could not expect to be offered subsequent employment. Fresh input of new legal

resources in the Office has been for some time at a virtual stop. We have continued the policy of delaying promotions for 120 days after approval. We have generally not replaced either legal or support staff positions when they are vacated and thus have imbalances in skill areas. We have limited our use of automated legal research services; we have reduced travel expenditures and almost eliminated expenditures for training. Spending for the Law Library has been reduced to approximately 50 percent of its prior levels. OGC's absorption of the costs of the fiscal year 1994 and 1995 locality pay increases, pay raise and promotions (including non-discretionary in-grade increases) have increased personnel costs by about 5 percent per annum. On the other hand, and perhaps because of the interesting work, we have had little attrition. We conducted a buyout program last fall, which was utilized by 14 people; we tried a follow-up program in December, which resulted in no more retirements.

We are working to reduce our staff and costs in every way we can, while making every effort to keep the current fiscal crunch from unduly affecting the quality of service we render to the Department or materially disrupting operations.

CURRENT ACTIVITIES AND ISSUES

We understand that the Subcommittee would like us to address some of the current activities in which we are involved, as well as current issues. Much of OGC's workload is on-going in the sense that we continue to review regulations, prepare cases to be filed by this Department and by the Department of Justice, defend against lawsuits filed against the Department, prosecute administrative cases, handle pending matters of all sorts, provide both formal and informal advice, and draft proposed legislation. While the names and issues change, the basic legal services we provide are essentially the same over time. However, I would like to highlight a few areas.

A number of issues and concerns have commanded our attention and our legal resources this year, and will continue to do so. These are days of change. The reorganization of the Department has required and continues to require a great deal of legal attention, as agencies change the way they do business. The issues generated by these changes are extensive. We have reexamined, and continue to reexamine, our programs and our ways of doing things. We have spent a great deal of time on the thankless work of conducting collection cases and timber defaults which go back to the last decade. And, of course, we have our continued involvement in the extremely complex Pacific Northwest wildlife and forestry issues which have consumed a major portion of my time. Much of our legal resources have been devoted to defending ongoing Forest Service programs in timber, grazing, and recreation.

Looking ahead, this year is a farm bill year. We know what to expect of this work, which is an all consuming project. It has begun.

Meanwhile, we continue to provide legal services in connection with international trade issues. Legislation implementing the Uruguay Round and the North American Free Trade Agreements has passed, and we are working to assist USDA agencies in the programmatic and regulatory phases of the implementation process.

OGC attorneys are substantively involved in providing legal services related to the changes in the Department's crop insurance program; nonprocurement suspension and debarment issues; and the protection of the public interest in regards to food stamp fraud and the development of the Department's plans for the extension of Food Stamp Program electronic benefit transfer systems.

In the regulatory area, we have been addressing a number of significant legal issues. In our animal and plant health

programs, we are defending a lawsuit brought by the State of Florida over the cost of eradicating citrus canker. We also have worked with Animal and Plant Health Inspection Service (APHIS) on a variety of phytosanitary measures, including the importation of cattle and Hass avocados from Mexico. This required addressing the controversial hot-iron facebranding issue. We provided extensive legal support for the boll weevil eradication program and assisted in the programmatic Environmental Impact Statement for the Animal Damage Control program. We also have been addressing a number of significant food safety issues, such as the labeling of poultry products as "fresh"; safe food handling labels; nutrition labeling for meat and poultry products; and the regulation of mechanically separated meat and poultry. We provided legal support for the development and implementation of a USDA pathogen reduction and Hazard Analysis and Critical Control Point program for meat and poultry inspection systems.

In the perishable agricultural commodity area, we are working with Agricultural Marketing Service (AMS) the agency to streamline procedures in the adjudication of private disputes, and recently, we negotiated a \$1.5 million settlement in a case involving misrepresentation and a failure to abide by the terms of a contract. We continue to provide legal advice in support of the statutory trust in perishable commodities and in livestock. In livestock issues, we participated in the work being done to investigate concentration in the red meat industry, and continue to provide extensive legal advice in AMS work in investigating cases of unfair and deceptive practices.

As a result of new research and promotion legislation, and of amendments to some existing legislation, we have worked with program officials to help develop new promotion orders for fluid milk products, cut flowers, and sheep and wool, and we have revised regulations for the watermelon and lime programs. We have also been involved in significant litigation challenging the

beef research and promotion program, and the almond marketing order. During the past year, we were involved in a number of formal rulemaking proceedings involving, for example, tart cherries, milk, and almonds. We have worked extensively on AMS regulations to bring the Plant Variety Protection Act into conformity with the 1991 International Convention for the Protection of New Varieties of Plants. In the animal welfare area, we worked with APHIS officials to promulgate regulations governing "Swim with the Dolphin" programs, and we worked with Grain Inspection officials to develop regulations prohibiting adding water to grain. We also worked on regulations to consolidate AMS' laboratory testing programs into a new Analytical Laboratory Testing Services division.

We have also been involved both in developing relevant new regulations and looking for ways to eliminate outmoded ones in the agricultural credit area. We provide legal services to agencies which manage some of America's largest lending portfolios. Overall, USDA extends credit of nearly \$100 billion through its various programs. We oversee such legal work with a far smaller staff than a comparable private organization would use. OGC continues to expend resources in completing foreclosure workload post Coleman. Given the substantial workload of U.S. Attorney offices, a significant amount of OGC's workload involves the litigation of foreclosure actions.

The Acting Secretary, and I am sure, Secretary-designate Glickman, are committed to regulatory reform. Regardless of the eventual fate of the regulatory moratorium legislation, we will work with Department officials to implement the President's regulatory reform program. This promises to be a significant undertaking as we work with agencies throughout USDA to reduce regulatory burden, eliminate obsolete or unnecessary regulatory requirements, and streamline regulation, particularly in the areas of rural farm and utility lending.

We are working with our clients to address developing policy areas. For example, the recently enacted Rural Electrification Loan Restructuring Act and the Energy Policy Act of 1992 are bringing change and deregulation to our electric and telephone loan business. We must understand and anticipate the risks as we defend the Government's interests.

In the natural resources area, we have been involved in a number of extremely significant undertakings involving national forest management and soil conservation programs including, of course, the "spotted owl" cases and the President's Forest Plan in the Pacific Northwest. Management of our public lands is a subject of considerable debate and litigation. A great deal of legal work is generated as new scientific information evolves concerning various species of wildlife, plants and fish and we deal with the impacts of managing that new information with respect to ongoing projects and commitments. We must devote our attention to these issues and the need for legal assistance in the preparation of regulations and policies updating and implementing the Department's diverse natural resource programs.

We have also devoted considerable resources to other legislative and regulatory initiatives, such as mining laws reform, reauthorization of the Clean Water Act and of the Comprehensive Environmental Response, Compensation, and Liability Act. In addition, we regularly provide advice on compliance and litigation arising under the pollution control laws. These issues most frequently come up in connection with abandoned and inactive mines on federal lands.

All these comments hardly touch upon the dozens of daily issues that come before a Department of over 100,000 employees administering programs for 29 agencies.

FY 1996 BUDGET REQUEST

For fiscal year 1996, OGC is requesting \$27,860,000 in direct appropriations. This request represents a net increase of \$1,868,000 over the fiscal year 1995 appropriation. The net increase includes \$480,000 for the annualization of the fiscal year 1995 pay raise and the anticipated fiscal year 1996 pay raise, \$1,156,000 for salary adjustments which will be used to support the annualization of locality pay increases, within grade increases, reclassifications, and promotions, and \$65,000 for inflationary costs.

This request also includes \$500,000 for improvements in our computer systems area. With this increase, we will replace 50 percent of our obsolete personnel computers and upgrade system and word processing software. We also plan to implement a case tracking system in approximately 50 percent of our offices with "off the shelf" software and replace outdated dot matrix printers with lasers.

However, these increases are offset by a \$65,000 reduction for administrative efficiency, in keeping with the President's Executive Order to promote the efficient use of resources. The budget also reflects a reduction of \$255,000 in support of the President's Executive Order mandating a reduction in Federal employment and a reduction of \$13,000 for the Federal Telecommunications System.

Mr. Chairman, we realize that in these times of huge Federal deficits and budgetary caps all agencies must tighten their belts and learn to provide more with less. It goes without saying that we are willing to do our part and have in fact adopted a number of cost-saving measures in both fiscal year 1994 and fiscal year 1995. However, as has been pointed out before, America is an increasingly litigious society. Our workload continues to grow in almost every way, whether measured by the number of issues, by increasing complexity, or some other indicator. At the same time, Congressional and Departmental initiatives require new or

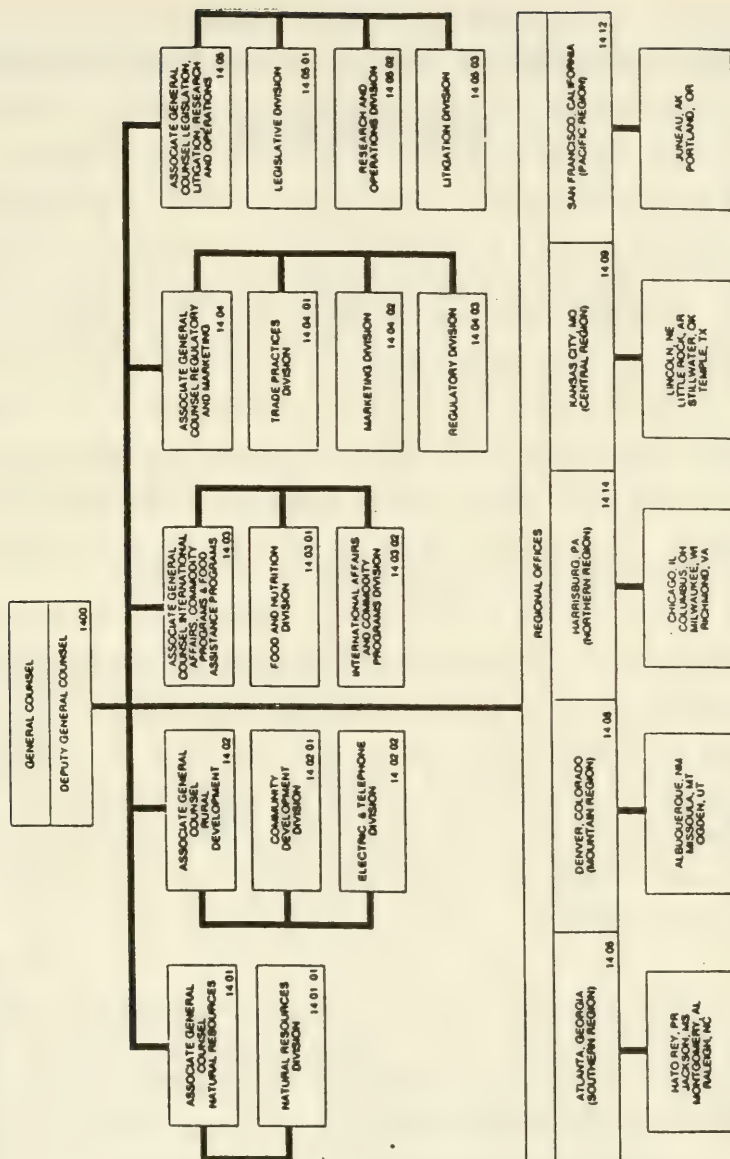
expanded legal services. Coming into this job with over 37 years of legal experience, mostly in a very active private practice in Tennessee, I have been conditioned not only to handling crises, deadlines, and stress, but also to meeting commitments.

The facts are easy to see. OGC is a staff agency, roughly 93 percent of whose costs are for personnel compensation. Our program is the provision of legal services; we do this with people. Without them, we cannot. Approval of our appropriation request would add no new people. To approve a lesser sum means further personnel reductions and an adverse effect on daily operations. Therefore, I submit to you that the entire amount of our budget request is essential to maintaining our current, existing staff and levels of service.

CLOSING

That concludes my statement, Mr. Chairman. We appreciate the support this Subcommittee has given us in the past. I will be happy to answer any questions you and the Subcommittee members may have at this time. Thank you.

U.S. DEPARTMENT OF AGRICULTURE
OFFICE OF THE GENERAL COUNSEL



THE MISSION OF THE OFFICE OF THE GENERAL COUNSEL IS TO DETERMINE LEGAL POLICY AND DIRECT THE PERFORMANCE OF ALL LEGAL WORK BY THE DEPARTMENT.

SUPERSEDES CHART DATED: MARCH 1, 1990

OFFICE OF INSPECTOR GENERAL

PREPARED STATEMENT OF ROGER C. VIADERO, INSPECTOR GENERAL

INTRODUCTION AND OVERVIEW

Good afternoon, Mr. Chairman and members of the Committee. I am pleased to have this opportunity to visit with you today to discuss the activities of the Office of Inspector General (OIG) and to provide you with information on our audits and investigations of some of the major programs and operations of the U.S. Department of Agriculture (USDA).

Before I begin, I would like to introduce the members of my staff who are here with me today. James Ebbitt, Assistant Inspector General for Audit; Craig Beauchamp, Assistant Inspector General for Investigations; and Del Thornsby, Director of our Resources Management Division.

OIG's mission is to perform audits and investigations of the Department's more than 300 programs and operations, recommend policies and actions to promote economy and efficiency, and prevent and detect fraud, waste, and mismanagement in these programs and operations. We keep the Secretary and the Congress informed about problems and deficiencies relating to the administration of the Department's programs and operations and report criminal violations to the U.S. Attorney General.

Our organizational structure includes my Immediate Office and the offices of three Assistant Inspectors General--one each for Audit, Investigations, and Policy Development and Resources Management. Our diverse staff of auditors, criminal investigators, and other personnel is headquartered in Washington, D.C., with collocated regional offices in California, Georgia, Illinois, Maryland, Missouri, New York, and Texas.

Since my appointment as Inspector General last October, I have been reviewing our activities and accomplishments. I believe we have a strong, effective organization and ambitious audit and investigative programs. You, the

Congress, are our clients, and we are the eyes and ears of the Department for you and the Secretary. I plan to work closely with you to address your concerns. For example, recently I provided House Agriculture Committee Chairman Roberts, and others, our recommendations for improving the Food Stamp Program (FSP).

During my tenure as Inspector General, I hope to serve not only as one who points to problems but also as a consultant and advisor to management. Our audit staff will continue to work closely with agency officials to address key issues. I also intend to take a proactive posture on our investigative activities, increasing our cooperation with other Federal, State, and local law enforcement agencies to broaden the impact of our work.

One of my first initiatives is to seek forfeiture of assets involved in certain felony FSP violations. I want criminals to know that when they steal from the taxpayer, OIG intends to recover all that was lost. The Food Stamp Act currently allows for forfeiture of assets exchanged in a trafficking transaction. We are now seeking forfeiture of proceeds, instrumentalities, and property used to facilitate food stamp violations. This will deprive criminals of their incentive to violate the Act. Taking away the profits of crime will discourage food stamp trafficking, as shown by the dramatic success of forfeiture programs in other Federal agencies. We are currently developing the appropriate legislative language needed to accomplish this.

Another initiative is to keep OIG in a state of readiness to assist the agencies when disasters strike. For example, as soon as the California flood problems developed, we contacted the appropriate USDA agencies to determine the extent of any USDA assistance. We made two teams of auditors and investigators available to coordinate with USDA managers to assist in preventing fraud, waste, and abuse in these assistance programs. We have also established regional action plans to assure that we are involved at the front end of disasters to reduce the propensity for fraud, waste, and abuse and to bolster assistance efforts with State agencies.

We also have been involved in monitoring USDA's reorganization. On October 13, 1994, the President signed Public Law 103-354, the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994. The Act gave the Secretary the authority to reorganize the Department, including the establishment of subcabinet positions, restructure of agencies and offices, continued reductions in personnel, and consolidation and closure of field office locations. We are monitoring the reorganization effort to assess: (1) the impact of it on OIG's ongoing and planned work, (2) what additional work might be needed in response to the reorganization, and (3) what reorganization OIG might need to undertake.

Our achievements are not possible without the work of the Department's program managers and the many employees of the U.S. Department of Justice (DOJ) who have worked closely with us in carrying out our mission. Working together, our staffs identified program weaknesses and program violators. Capitalizing on the staffs' respective expertise, we created solutions for positive action. I am pleased to join a Department where such a climate of cooperation exists.

Adequate funding for our office makes good sense and good Government. I am proud to say that in fiscal year (FY) 1994, OIG continued to more than pay its own way. We produced 261 audit reports and obtained management's agreement on 1,461 recommendations. Management also agreed, as a result of our audit work, to recover \$42.5 million and put \$101.3 million to better use. We also completed 1,079 investigations and obtained 886 convictions. Investigations resulted in \$39.8 million in fines, restitutions, and other recoveries obtained during the year.

I believe that we are shortchanging the American people if our office is not adequately funded. Our auditors and investigators can continue to recover and save money for the taxpayers only if they have the equipment and tools needed to perform their duties. During the past few years, we have demonstrated our ability to do more with less; however, I believe that what I like to call the "four m's"--manpower, materials, machinery, and money--are being stretched to the limit. The agency has taken significant budget and staffing cuts over the

last couple of years, and we are at our ebb. For example, in January 1993, we had 875 employees on board. Now we only have 786--almost 100 people less than 2 years ago. I believe that any further fiscal or staff reductions could greatly affect our ability to provide sufficient service and assistance to you, the Congress, and to USDA agencies, and I request that the proposed increase be approved.

For FY 1996, we are requesting \$64.7 million and 825 positions. This reflects an increase in funds of \$1,451,000 over our FY 1995 appropriation. We are requesting funds for mandatory annual pay increases, legislatively required availability pay for law enforcement personnel, and retooling and/or replacement of law enforcement radios required by the Federal Communications Commission's mandatory changes in radio frequencies. I believe this is an austere request which we need to perform our mission and meet the current requirements of the Presidential and congressional initiatives.

Mr. Chairman, at this time, I would like to highlight some of our audit and investigation activities.

AUDIT AND INVESTIGATION ACTIVITIES

ENTITLEMENT PROGRAMS

FOOD AND CONSUMER SERVICES (FCS)

Food Stamp Program (FSP)

The FSP represents almost 41 percent of the Department's budget and has been designated a high risk area by the Department and the Office of Management and Budget (OMB). This year, approximately \$24 billion in food stamps will be issued to recipients. This is the largest program activity in the Department and, due to the ease with which food stamps may be illegally exchanged or used as a second currency, it is the program most vulnerable to fraud and waste.

With 1 in 10 Americans and over 207,000 authorized retail stores participating in the program, OIG must continue to channel substantial resources to FSP fraud prevention and detection efforts.

During FY 1994, we devoted approximately 45 percent of our investigative resources and 12 percent of our audit resources to FSP. We completed and issued 708 reports of investigation and 12 audits. The results of our work included 643 indictments, 663 convictions, and over \$7 million in fines, restitution, recoveries, and other monetary penalties.

In FY 1995, we will again expend a substantial percentage of our investigative resources in combating fraud perpetrated by retail grocery store owners who are authorized to accept food stamps and in trafficking cases where persons exchange food stamps for cash, drugs, guns, property, and other nonfood items. We will also continue our cooperative efforts with other law enforcement agencies to address the street trafficking of food stamps.

Retailer Fraud and Trafficking

Street trafficking in food stamps continues to be a problem, especially in areas where traffickers purchased food stamps from recipients at issuance sites. During the past year, we have conducted several investigations, usually with local law enforcement agencies, where we targeted traffickers who purchased food stamps.

We believe that cooperative Federal, State, and local efforts are the only way to effectively deal with such street trafficking problems. For example, in Smithfield, North Carolina, OIG agents, working with other law enforcement agencies, successfully penetrated an organized drug trafficking ring. Couriers were used by the ringleaders to bring large quantities of "crack" cocaine from Florida to Smithfield and Clayton, North Carolina. Juveniles were used to transport and sell the "crack" for cash or food stamps. During the investigations, members of the drug organization exchanged cocaine on

31 separate occasions for over \$23,000 worth of food stamps. Following the investigation, 16 people were charged with trafficking in food stamps, conspiracy to distribute "crack" cocaine, and the unlawful possession of firearms. In November 1994, 14 of the individuals pled guilty to these charges, and two went to trial and were found guilty. Sentencing is scheduled for later this month. The ringleader is facing three possible life sentences, and his supplier is facing 25 years to life under the sentencing guidelines.

In a major investigation in New York City, 70 individuals were charged with food stamp fraud and money laundering. The criminal complaint in this case charged the subjects obtained food stamp authorizations for "sham" retail stores to launder millions of dollars in illegally obtained food stamps. The "sham" stores conducted little or no business. The individuals deposited large amounts of food stamps in their bank accounts on a daily basis. It is estimated that the subjects unlawfully obtained and redeemed over \$40 million in food stamps. Seizure warrants were also issued for 31 bank accounts used by the conspirators. This investigation is continuing.

Another investigation in Los Angeles resulted in the owner of a milk delivery company being sentenced to 27 months in Federal prison and ordered to pay \$115,000 in restitution after he pled guilty to illegally redeeming \$2.3 million in food stamps. Our investigation disclosed that the dairy company operator began a home delivery service and was authorized to accept food stamps for his sales. He began to accept food stamps from other dairy drivers who had obtained the food stamps illegally and eventually quit selling dairy products to devote his full attention to trafficking in food stamps. By the time he was caught, he was redeeming between \$2,000 and \$6,000 in food stamps daily.

Electronic Benefits Transfer (EBT)

The EBT system was developed to provide food stamp benefits electronically as an alternative to paper coupons. There are nine States with EBT systems in operation. Eight of these have pilot on-line systems in operation and one

off-line. The EBT card is less negotiable on the street than paper coupons and, thus, does not lend itself for use as a "second currency" as readily. EBT also provides a useful tool in identifying potential retail store violators, and EBT-generated records have enabled us to better monitor and analyze sales and benefit activity at authorized retailers.

With the expansion of EBT, we expect to increase the amount of investigative resources devoted to investigating entities authorized to redeem FSP benefits through the EBT system. However, we cannot devote additional resources overall to FSP because of the critical demand for our services in other departmental programs.

We have supported the Department's EBT initiatives and believe that EBT will help reduce trafficking by recipients as well as make trafficking by retailers easier to detect and investigate. While the program is not fail-safe, EBT systems contain important data about transactions including dates, locations, items purchased, and parties involved that will be a valuable tool for OIG, FCS, and State staff in identifying and removing violators from FSP. In fact, we have already made use of EBT data in several major investigations. Following is an example of one of our cases.

In Baltimore, Maryland, where EBT is in operation, the owner and several employees of two small retail stalls in an indoor market were convicted of trafficking more than \$1.2 million worth of food stamp benefits most of which were delivered via EBT. During the investigation, we documented several hundred EBT trafficking transactions while they occurred using video surveillance. Based on the evidence developed during the investigation and a review of the EBT computer records of the store's transactions, we referred to the Maryland Department of Human Resources for administrative action over 7,000 recipients, representing 10 percent of the households participating in the program in Baltimore, as potentially selling their benefits to retailers in exchange for cash at less than the full value of the stamps.

We are completing an evaluation of FCS efforts to implement and expand EBT systems. We have also made a number of recommendations, including one that FCS and State and local agencies use EBT data to identify potential traffickers and that these leads be pursued aggressively. We are working with FCS officials to make EBT projects less vulnerable to fraud.

Emergency Program

FCS approved 25 Georgia counties for emergency FSP assistance because of flooding caused by tropical storm Alberto. At the request of the FCS Administrator, we helped agency staff monitor the emergency program. Based on our recommendations, FCS and the State took a number of steps to ensure that the program operated efficiently and opportunities for fraud and abuse were reduced. We recommended a computer program be developed and personal computers be placed in county offices to prevent duplicate issuances and ineligible enrollment. FCS quickly implemented these recommendations. We observed one of the approved counties sustained little physical damage, yet it was approved, based on its application, for an automatic mail issuance of 1 month's allotment totaling about \$450,000 for 1,600 households. After we informed FCS of our observations, the plans were stopped, and individual households were required to apply for assistance. As a result, the county approved only 41 households for assistance totaling \$12,300 and, while no legitimate recipient was deprived of benefits, these efforts prevented a wasteful expenditure of \$437,700 of the taxpayers' money.

Child Nutrition Programs

We reviewed the procurement practices of the Atlanta and Detroit Boards of Education to obtain goods and services for the Child Nutrition Programs. FCS had requested we audit the Atlanta Board of Education to see if contracts were awarded competitively and in compliance with Federal procurement standards. In Atlanta, we found that the cleaning and pest control contracts were not awarded competitively. These contracts resulted in questionable and excessive

costs of more than \$964,000 charged to Child Nutrition Programs over a 5-year period.

In Detroit, the board's practices resulted in prices higher than necessary for food purchased for Child Nutrition Programs. For example, contracts worth \$525,000 were awarded to a vendor whose products did not meet specifications and were not the lowest price. The board paid \$316,000 more per year for food because it did not assess whether it was more economical to award all items bid to one vendor or to separate the items among two or more vendors.

FCS agreed with our recommendations that the Atlanta board reimburse the Child Nutrition Programs for the excessive and questionable costs and that the Detroit board modify its procurement practices to comply with Federal regulations.

CONSUMER PROTECTION

FOOD SAFETY AND INSPECTION SERVICE (FSIS)

Aid to FSIS for Improving Inspection Function

We completed our evaluation to identify areas where we could aid FSIS in addressing meat and poultry inspection functions. FSIS has numerous initiatives underway for implementing changes to modernize the meat and poultry inspection programs. However, it will be several years before these changes are fully operational. In the meantime, we found FSIS needs to address the following areas to strengthen the current systems until the new ones are fully operating including: (1) implementing a risk-based inspection system, (2) evaluating data supporting nutrition claims, (3) requesting authority to impose sanctions on producers who violate inspection regulations, (4) increasing plant owner and operator responsibility for meeting law and regulatory requirements, and (5) educating consumers on how to prevent food-borne illnesses.

Meat Inspections

We sometimes expend resources on reviews which result in a determination that USDA employees followed appropriate procedures. It is just as important for OIG to say that someone did nothing wrong as reporting when someone has done something wrong. For example, we initiated an investigation to determine if employees of an Ohio meat plant caused false charges to be filed with a local prosecutor against an FSIS inspector assigned to the plant. FSIS believed the allegations may have been made to prevent the inspector from carrying out his responsibilities. Initial results of our investigation were used to obtain DOJ representation for the inspector. The city prosecutor subsequently dropped the charges against the inspector based on evidence developed during the investigation.

In another instance, FSIS officials asked us to review charges that "inconsistent and unjustified inspections" by three FSIS inspectors resulted in excessive downtime at an Iowa pork plant and contributed to plant management's tentative decision to close the plant. With FSIS technical experts, we evaluated the conduct of the inspectors to determine if they exceeded their authority when making inspection decisions. We found that while the three inspectors' conduct was occasionally unprofessional, the inspection staff generally acted according to FSIS procedures. Downtime at the plant occurred for valid reasons and not as a result of arbitrary actions by line inspectors. We recommended that FSIS provide counseling, training, increased supervision, and rotation or reassignments to improve inspector performance. FSIS agreed to and implemented our recommendations, including replacing the inspectors previously assigned to the plant.

\$140 Million Loss Due to Unapproved Pesticide

We conducted an investigation with the Environmental Protection Agency and the Food and Drug Administration where the owner of a Minnesota business was convicted of knowingly spraying an unapproved pesticide on almost 19 million bushels of oats part of which were used by General Mills in the production of

approximately 160 million boxes of cereal. The business was under contract with General Mills to apply a Government-approved pesticide on oats stored by General Mills at grain elevators which are regulated by the U.S. Grain Standards Act. The unapproved pesticide was more than 50 percent cheaper than the approved product specified in the contract, but the business fraudulently billed General Mills for the cost of the approved product. The business saved over \$85,000 from the owner's illegal conduct but General Mills suffered over a \$140 million loss from the fraud.

ANIMAL WELFARE

Animal rights organizations, members of the public, and the media have expressed considerable interest in the treatment of animals by animal dealers and research facilities. Our audit of the Animal and Plant Health Inspection Service's (APHIS) enforcement of the Animal Welfare Act focused on animal dealers and research facilities. We again reported that APHIS does not have authority under existing legislation to effectively enforce the requirements of the Act. The authority to terminate or not renew licenses in instances of serious or repeat violations is needed, and we recommended that APHIS seek legislation for this purpose. We also reported that APHIS did not inspect research facilities prior to issuing initial registrations.

HOUSING PROGRAMS

RURAL HOUSING AND COMMUNITY DEVELOPMENT SERVICE (RH&CDS)

The Rural Housing and Community Development Service, formerly part of the Farmers Home Administration, provides loans to individuals for single family housing and developers for housing projects in rural areas. As of September 30, 1994, over 688,000 borrowers owed RH&CDS about \$31.5 billion in housing loans and loan guarantees. As the "lender of last resort," many of RH&CDS' loans are high risk and, as a result, loanmaking and loan servicing functions are critical to avoid unnecessary losses. We continued our reviews

this year of these loan programs and continue to be instrumental in identifying many issues requiring corrective action.

Rural Rental Housing (RRH) Program

The RRH Program is designed to provide economical rental housing for persons with low to moderate incomes. Our investigations brought several criminal convictions for individuals who have defrauded the RRH Program. In Indiana, an RRH borrower, his wife, daughter, and a coworker were convicted of conspiring to defraud RH&CDS by submitting fictitious invoices for work never performed during the construction of 10 RRH projects. The projects' costs were actually \$1.7 million less than the amounts the borrower certified.

An RRH borrower in Michigan and his office manager pled guilty to criminal charges that they unlawfully spent about \$800,000 from accounts pledged to RH&CDS during the construction of at least three RRH projects. The owner of the projects, who acted as the general contractor and managing agent of existing RRH projects, used an elaborate check-kiting scheme and other means to conceal the true costs of the projects and to move large amounts of money among the various accounts undetected by their independent CPA's. The borrower, by concealing his identity of interest as a construction superintendent, was able to charge a second superintendent's salary to the projects in addition to taking a profit as the general contractor.

Misuse of Millions of Rural Rental Housing Funds

During the past year, we also focused on RH&CDS' oversight of the Multi-Family or RRH program borrowers who own both the projects and the companies that manage them. Previous audits have found numerous cases of noncompliance with program requirements and ineligible and unsupported charges to projects among these types of borrowers.

In one RRH case, RH&CDS determined that a management firm that operated 38 RRH projects in Texas was not maintaining the projects or properly handling their

accounts. In a coordinated approach, RH&CDS addressed the maintenance issues while OIG evaluated the status of funds in the accounts.

We found that the management firm had not properly accounted for approximately \$5 million of replacement reserves, reserves for taxes and insurance, rental income, and general operating expenditures. About \$1.7 million of this amount represented cash in project bank accounts that had been depleted. Also, because the management firm was delinquent on its 1991 and 1992 taxes, RH&CDS paid another \$700,000 to keep the properties from becoming encumbered; the reserves for taxes had been similarly depleted. The management firm could not account for an additional \$2.6 million it had collected as rent or rental assistance over the first 7 months of 1993.

We recommended that RH&CDS require the management firm to account for the \$5 million in operating funds and missing reserves and that it replenish all funds not properly expended on project operations. We also recommended that RH&CDS take administrative action against the firm. RH&CDS officials agreed, and they have begun debarment procedures against the firm and have initiated an asset investigation to determine whether the firm or its chairman has property that can be attached for recovery of the missing funds.

In a separate review, we audited 13 management companies which operated 458 projects in 25 States and Puerto Rico and found that all 13 companies misused RRH funds. In total, almost \$1 million, or 14 percent of the operating and maintenance expenditures for the projects audited, had been improperly expended. Unallowable expenses we noted included duplicate management expenses, excessive site management fees, and improper markups on intercompany transactions charged to the projects.

We recommended that RH&CDS monitor the reasonableness of charges made to projects by companies with financial ties to project owners. RH&CDS officials agreed with our findings and have implemented new requirements that borrowers disclose all identity of interest companies and required that all reserve account funds be deposited into counter-signature accounts.

FARM PROGRAMS

CONSOLIDATED FARM SERVICE AGENCY (CFSA)Payment Limitation

Congress has established payment limits for producers which vary depending on the program involved. For example, each "person" contributing to a farming operation may receive up to \$50,000 in program deficiency payments if the "person" meets eligibility requirements. For the wool and mohair price support program, the payment limit is higher (\$150,000 in 1993). In prior appropriation hearings and semiannual reports to Congress, we discussed our concern that provisions in existing legislation permit individuals to form entities with the sole purpose of having such entities earn additional payments. We referred to these entities as "shell" entities because they have little, if any, risk of economic loss in a farming operation and are formed when individuals use their personal management and claim to be "actively engaged in farming." We previously recommended that the legislation be amended to prevent the creation of such "shell" entities.

During this past year, the CFSA has taken action to amend its payment limitation rules. As part of the effort, CFSA invited OIG to participate in discussions involving the proposed changes. We believe the proposed rule changes address many of our concerns and will improve the overall administration of payment limitation provisions. However, our concerns on payment limitation abuse created by individuals using "shell" entities to qualify additional "persons" for payment cannot be addressed by regulation until a legislative change is made. One suggested change would be to attribute program payments to individuals. This change was supported by the agency, OMB, and the Secretary of Agriculture in 1990.

Disaster Assistance

Nonprogram Crops

Our audits and some joint OIG/CFSA reviews of 1993 disaster assistance for nonprogram crops (squash, cucumbers, onions, prunes, etc.) disclosed that legislative and program requirements were not sufficient to prevent significant fraud and abuse. Of the \$1.6 billion appropriated to address losses from the 1993 midwest flood and other disasters, about one-third, or approximately \$533 million, could be paid on nonprogram crops.

For example, one Florida producer received \$98,000 in disaster payments for a bean crop in which he invested less than \$6,500. A Missouri producer paid \$138,000 for a farm, including improvements and growing crops, and just 3 weeks later received \$200,000 in disaster payments on that farm. In Arkansas, 37 producers in one county received over \$1 million in disaster assistance, including over \$225,000 paid to the county committee members for turnip greens. These producers had not followed proper farming practices and had no markets for the turnip greens. In Texas, disaster payments for melons tripled over a 3-year period, from \$5.6 million in 1991 to \$16.6 million in 1993.

These audits have resulted in many producers being referred for criminal or civil investigation. Also, you have passed legislation that requires producers to certify crops at the time of planting and that payment rates be adjusted downward to reflect production costs not incurred by the producer.

Marketing Loan Provision Objectives

Cotton and Rice

The common objective of the marketing loan provisions of the price support program is to make U.S. commodities competitive in world markets. Marketing loan incentives are intended to achieve this objective by (1) minimizing crop

forfeitures and the accumulation of commodities in Government inventory and (2) increasing the supply of U.S. commodities available for export and domestic use.

Cotton and rice marketing loan costs (loan discounts and alternative direct payments) for the 3 calendar years ending December 31, 1992, totaled about \$1.2 billion. Discounted rates for rice and cotton are based on world prices which are frequently lower than domestic prices. In contrast, discounted loan repayment rates for oilseeds, honey, and grains are based on domestic prices. Cotton and rice producers sell their crops at the domestic price (either for export or domestic use) and still collect the marketing loan payment based on the difference between their loan rate and the adjusted world price. Our audit found that about 95 percent, or \$1.14 billion, of the \$1.2 billion paid to cotton and rice producers was not needed to encourage producers to repay or forgo loans.

Current law would allow the use of domestic prices for cotton loans but not for rice loans. Statutory change would be needed to allow CFSA to use domestic prices in the rice program, and the Department agreed to take our recommendations into consideration as proposals for the 1995 Farm Bill are developed.

I have included two charts with my statement that demonstrate this difference between the domestic and adjusted world prices for cotton and rice. The first chart (Figure 1) depicts the domestic U.S. spot market and adjusted world prices for cotton during the 36-month period ended August 31, 1994. The world price was below the loan rate for all but the last 8 months of the 36-month period. Domestic prices fell slightly below the loan rate for only 5 of the 36 months. The second chart (Figure 2) depicts the domestic and adjusted world prices for rice during the 36-month period ended August 31, 1994. The world price was below the loan rate for all but 6 months of the period. Domestic prices were above the loan rate for 24 of the 36 months. In both examples, producers received program payments based on the difference between the loan rate and adjusted world price.

FIGURE 1

COTTON VALUES

September 1991-August 1994

CENTS PER POUND

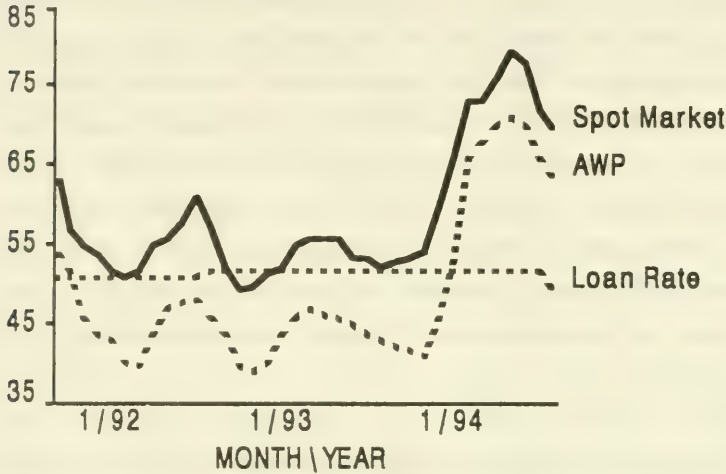
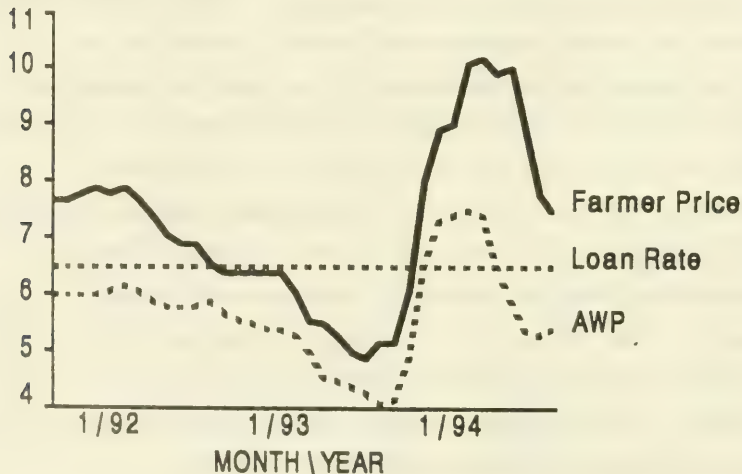


FIGURE 2

RICE VALUES

September 1991-August 1994

DOLLARS PER CWT.



Farm Credit

CFSA administers loan programs that provide farm credit to borrowers who cannot obtain credit elsewhere. As of September 30, 1994, about 208,000 borrowers owed CFSA over \$12 billion in direct farm loans while another 80,000 borrowers had obtained CFSA guarantees of almost \$7 billion in private loans.

Servicing Delinquent Loans Resulted in Large Error Rate

We reviewed CFSA's servicing of Farmer Program loan accounts that were delinquent over 180 days. We reviewed 27 borrowers who either had their debts written down or were allowed to buy out their indebtedness at a reduced amount of about \$2.8 million. We found that half the borrowers' applications we reviewed contained inaccurate or incomplete information and that almost a third of the borrowers were approved for unauthorized writedowns and writeoffs totaling \$902,000. We statistically estimated that in the 18 States we reviewed, borrowers were approved for unauthorized benefits totaling about \$73 million of the approximately \$226 million in benefits conveyed.

CFSA's servicing decisions were based on incomplete reviews: counties had not adequately verified information from the borrowers, and States did not adequately review the counties' servicing decisions. We obtained corrected information from the borrowers and from CFSA county offices to conduct our review.

CFSA officials agreed to draft regulations requiring that they complete an extensive evaluation of the financial condition of the borrowers. In addition, CFSA directed State offices to develop followup systems to improve servicing actions.

Careful Reviews Could Have Saved Over \$31 Million in Unneeded Subsidies on Farm Loans

CFSA loans may be made at reduced interest rates if the borrower cannot generate enough cash-flow to pay CFSA's regular rate. CFSA is required to review the financial condition of borrowers annually to ensure the additional subsidy is still needed. As of December 31, 1992, more than 60 percent of CFSA's outstanding farmer program loan portfolio, totaling about \$5.6 billion, was at the reduced rate.

Our audit disclosed that CFSA did not properly calculate the borrowers' cash-flow when trying to determine their ability to pay CFSA's regular interest rate. One-third of the loans in our statistical sample either were incorrectly made at reduced interest rates or were allowed to remain at those rates even once the borrowers became ineligible. We estimate that through the 1993 payment dates, CFSA incurred unnecessary interest subsidies of about \$31.9 million on about 26,000 loans nationwide.

We recommended that CFSA increase the interest rates for the borrowers we identified, clarify instructions for granting reduced loan rates, perform annual reviews, and strengthen monitoring to detect county office errors in a timely manner.

CFSA agreed to improve its controls over loanmaking and servicing to ensure that those borrowers who can pay regular rates are not granted reduced rates.

Coordinated Followup Review on Guaranteed Loans

We coordinated a review for the President's Council on Integrity and Efficiency (PCIE) to update the status of agency progress in implementing the debt collection tools prescribed by OMB Circular No. A-129 since the last PCIE review in 1988. Included in the review were the Departments of Agriculture, Commerce, Education, Health and Human Services, Housing and Urban Development, Veterans Administration, and the Small Business Administration. Collectively,

the guaranteed loan programs administered by these departments accounted for about 94 percent of the Government's outstanding loan guarantees.

In the 1988 review, we disclosed that CFSA had not begun to deal with "invisible debt" (because it did not appear on financial records) and, as a result, did not establish claims for millions of dollars of losses it absorbed on guaranteed business and farmer loans after disposition of security property. Since that time, the agency has begun to establish an unsatisfied guaranteed borrower account to be held in an active status for 5 years following the fiscal year in which liquidation was completed or until the account is paid in full, the borrower and all guarantors have been released from liability, and/or the account is otherwise satisfied. This action renders the debt "visible" and will permit the agency to apply collection techniques as warranted. Although CFSA monitors subsequent lender collection activity and requires an annual report on the status of these debts from each lender, it has not prescribed any specified actions for agency or lender use in recovering these debts.

Legal restrictions continue to prevent the use of private collection contractors for CFSA farm program loans. Although it has been demonstrated that private collection agencies are a cost-effective means of collecting delinquent debt, CFSA is one of many agencies statutorily prohibited from using private agencies to collect certain types of debt.

NATURAL RESOURCES

FOREST SERVICE (FS)

The Forest Service (FS) manages natural resources on over 191 million acres of the National Forest system. For FY 1994, the FS appropriation totaled approximately \$3.3 billion, and timber sales and other receipts were estimated at an additional \$1.5 billion.

Contracting Costs for Airtankers Are Higher than Necessary

The FS uses airtanker contractors to help suppress wildfires. We previously reported that in 1991 the FS had improperly acquired excess turbine aircraft from the U.S. Department of Defense and exchanged them with contractors for their piston engine aircraft. FS officials justified the exchanges on the grounds they would avoid substantial increases in airtanker contract costs and improve the safety of airtanker operations. Because of the potential effect the exchange had on competition, we evaluated FS contracting procedures for obtaining airtanker services.

The FS awards airtanker contracts every 3 to 5 years. The 1993 contracts were awarded to six contractors who agreed to make 29 airtankers available at 34 bases at a cost of about \$15.7 million for FY 1993. Contract costs are based on a fixed number of days the aircraft must be available, predetermined hourly flight rates set by the FS, a 20 percent profit margin included in the flight rate, and a fuel consumption allowance.

We found that the cost of airtanker service was \$1.9 million higher than necessary because of inflated flight rates and fuel costs and unnecessary base locations. Among our recommendations was one that the FS negotiate new airtanker contracts prior to exercising the 1995 contract option year. FS officials agreed with our recommendations and have negotiated new contracts for FY 1995.

New Fee System Needed for Ski Areas

The FS issues permits to private businesses to operate more than 120 ski resorts on FS lands. While large ski resorts generate millions of dollars in revenue, they pay little in fees for their use of FS lands. Legislation requires that a fee for the use of FS lands be based on fair market value. We

previously questioned whether the current fee system generates returns of fair market value and recommended that the FS develop a system that does. As a result, the FS now has an extensive study underway to develop a fair ski fee system.

MANAGEMENT AND CONTROL OF ENVIRONMENTAL HAZARDS

For the past 6 years, OIG has placed special emphasis on the Department's compliance with Federal and State standards for environmental protection. We have systematically addressed the facilities compliance activities sponsored through the Hazardous Waste Program that is coordinated by the Assistant Secretary for Administration. In previous years, we have reported on the management and disposal of hazardous materials at USDA laboratories and the performance of interagency agreements for hazardous waste cleanup. In 1994, we reported on the Department's underground storage tank replacement and removal activity. We found that while significant achievements had been made in meeting the Federal deadline, improvements would be needed in budgeting, monitoring, and technical oversight to ensure total compliance. We are now in the process of determining the status of the Forest Service's hazardous waste management at active and abandoned mines.

We also are reviewing the management and disposal of hazardous biological materials with a particular interest in animal pathogens that could infect USDA employees and the public. Early in this work, we reported that a laboratory operated by APHIS did not meet Federal safety standards for handling Brucellosis and Bovine Tuberculosis organisms. APHIS has since agreed to terminate all work with these pathogens at this laboratory. Our work continues to focus on both the environmental and health issues of hazardous materials and, in the future, we will be reviewing other aspects of USDA facilities' compliance and employee health and safety. This year we will also begin our review of agricultural chemicals and the Department's consideration of the environmental impact of the chemicals.

MARKET DEVELOPMENT

FOREIGN AGRICULTURAL SERVICE (FAS)Foreign Food Aid Assistance

In our testimony last year, we mentioned our ongoing evaluation of the \$1.8 billion of food aid assistance provided to the Newly Independent States of the former Soviet Union. Under various Commodity Credit Corporation (CCC) programs, the donated commodities were to be used for humanitarian purposes or sold, with the proceeds being used to further free market reforms. The evaluation assessed the effectiveness of the controls established to manage the food aid program, evaluated the cooperating sponsor's compliance with the donation agreements, and reviewed the shipment, storage, and distribution of the commodities.

OIG reviewed 12 of the 93 agreements valued at \$212 million. The task team traveled to Moscow, Minsk, St. Petersburg, and Novorossiysk and met with numerous private voluntary organizations and foreign government officials. We found that CCC and its cooperating sponsors were generally successful in shipping and distributing food to meet urgent food needs, and introducing the concepts of reporting requirements and competitive bidding. However, six of the eight cooperating sponsors we reviewed did not comply with the terms of the donation agreements, resulting in unnecessary costs of about \$9 million. Unsure of program requirements, some recipients limited competition or allowed price fixing during the sale of commodities. We recommended that CCC write program regulations and require cooperating sponsors to arrange for audits and to submit reports to Congress as required by law.

RESEARCH, EDUCATION, AND ECONOMICS

We are reviewing the delivery systems through which the Department achieves its research, extension, and education goals. A portion of the money appropriated to an agency for these purposes is distributed at the discretion

of its administrator from administrative funds or as a result of congressional earmarking. In FY 1995, more than \$100 million of the Department's research and extension budget will be distributed this way. The initiative for these programs comes from individual interests, and their continuation depends on attracting influential sponsors. Consequently, these projects are vulnerable to abuses that are not as common to the formula funds and competitive awards we have reviewed. We found these funds had been used directly or indirectly to establish "grass roots advocacy" lobbying efforts for legislated program authorities and further funding.

Our audit of the Cooperative State Research, Education, and Extension Service's (formerly Cooperative State Research Service) use of its noncompetitive agreements identified five agreements arranged by the Administrator to accommodate long-term acquaintances and to direct them in carrying out activity that did not comply with the authorized use of these funds. We found three projects under the direct supervision of the Administrator that funded lobbying activity to influence the establishment of a new program authority or higher funding levels for programs he favored. Three projects funded long-term employment for private consultants who provided personal services in support of the Administrator's assigned duties and, in one case, his personal business.

Our review of the agency's use of these agreements from FY 1987 through 1992 identified no less than 97 project allocations that supported and promoted an organization that served as a lobby broker for the Land Grant Institutions. In response to our findings, the Assistant Secretary for Science and Education replaced the Administrator, imposed procedural scrutiny over the use of these authorities, and pledged that USDA funds would no longer be distributed to the lobbyist organization.

ACCOUNTING AND FINANCIAL MANAGEMENT

FINANCIAL STATEMENT AUDITS

As required by the Chief Financial Officers Act, we completed eight financial statement audits. We issued unqualified opinions on the FY 1993 financial statements of the Commodity Credit Corporation, Federal Crop Insurance Corporation, Farmers Home Administration/Rural Development Administration, Food and Nutrition Service, Rural Electrification Administration, and Rural Telephone Bank. Audits of the Forest Service and the departmental consolidated statements resulted in qualified opinions, largely because the Forest Service and the Department had not had sufficient time to fully implement corrective actions for the deficiencies found in prior audits. Nevertheless, the two qualified opinions were an improvement over the adverse opinions issued a year earlier.

The Department and its agencies are exerting considerable effort to improve their financial systems and reporting processes. Work continues on the Department's Financial Information System Vision and Strategy (FISVIS), the purpose of which is to develop a blueprint for a single integrated financial management system that meets all of Treasury's and OMB's requirements and fulfills the needs of USDA managers. We are providing audit assistance to the Department in the design and development of FISVIS, and we believe that FISVIS will improve the quality of USDA's financial information. The Department estimates that the FISVIS foundation system will be implemented within approximately 2 years and that all USDA financial management systems will be integrated within approximately 4 years.

Although USDA is emphasizing financial accountability and improving its financial systems, instances of inaccurate and inconsistent application of accounting principles, inaccurate and incomplete accounting records, and errors and omissions in account balances will continue to exist until corrective changes are fully implemented.

INFORMATION RESOURCES MANAGEMENT

MONITORING INFO SHARE PROJECT

We monitored Info Share developments and provided technical assistance to the project staff. Info Share is a project, expected to cost in excess of \$1 billion, to integrate information systems and business processes in order to improve delivery of services to customers of farm service and rural development agencies. During our monitoring effort, we raised the following concerns.

The Info Share staff has accelerated its acquisition strategy by dividing the planned procurement into several phases. We believe this approach will make it more difficult to meet the overall objectives of the program. The strategy emphasizes procuring newer and faster computers to continue old tasks rather than the redesign of business processes. In addition, we questioned the need for some of the acquisitions, the time available to test products, and the cost effectiveness of the new strategy.

Problems in staffing Info Share continue. The project is being staffed under a matrix management concept whereby agencies provide personnel who retain their current job responsibilities. Project managers complain that this organizational structure does not give them adequate control over personnel assigned to the project.

Info Share managers need to implement a usable project management system to track critical activities and milestones. The current system is not used because it requires a large volume of data entry. Also, there are no instructions on how to use the system even though managers said they would develop such a guide in response to one of our previous recommendations. Info Share officials are currently evaluating alternative systems and methods for managing and tracking project activities.

We questioned the need for and costs of some items purchased with training funds. In addition, we found that Info Share management had entered into an agreement with the USDA Graduate School to provide training, then dealt directly with the training subcontractors instead of first going through the Graduate School in accordance with procurement regulations. Info Share management agreed to increase its oversight of the Graduate School agreement to ensure training funds are spent in the most cost-effective manner.

Info Share has developed the "Common Access Manager (CAM)," a hardware and software system that, if successful, would connect partner agency systems and facilitate data sharing. However, we found that CAM, as presently designed, would not be able to provide data sharing. We also questioned the purpose and costs of CAM.

Info Share management generally agreed with our concerns and is reevaluating the program. All projects have been put on hold pending the outcome of this analysis. We will continue our monitoring effort and will work closely with management to help ensure successful completion of the project when it is resumed.

Based on a request from the Assistant Secretary for Administration, we also performed a review of the accounting for Info Share FY 1993 and 1994 expenditures. We found that the Info Share Budget Tracking and Accounting System could only provide accurate information concerning Info Share costs and expenditures paid directly with Info Share funds. The tracking system did not collect and report on the Info Share costs paid out of agency funds. We estimated costs and expenditures about \$38 million higher for 1993 and about \$44 million higher for 1994 than those expenditures and costs reported by the Department. The Assistant Secretary for Administration agreed with our findings and is working to improve systems used to track and account for Info Share costs.

CONCLUSION

This concludes my statement, Mr. Chairman. I appreciate the opportunity to appear today and present this information, and I hope that my comments have been helpful to you and the Committee. I will be pleased to respond to any questions you may have at this time.

OFFICE OF THE SECRETARY AND DEPARTMENTAL ADMINISTRATION
PREPARED STATEMENT OF WARDELL C. TOWNSEND, JR., ASSISTANT
SECRETARY FOR ADMINISTRATION

Mr. Chairman and members of the Subcommittee, I am pleased to present the fiscal year 1996 budget request for headquarters-level and Department-wide activities. My presentation will discuss the appropriations requests for the Office of the Secretary, Departmental Administration, the InfoShare Program, Agriculture Buildings and Facilities, including the Department's Strategic Space Plan, USDA Advisory Committees, and Hazardous Waste Management. With me today to ensure thorough and complete answers to your inquiries are: Connie Gillam, the Budget Officer for Departmental Administration, and Steve Dewhurst, the Department's Budget Officer.

REORGANIZATION

Since I last appeared before this Committee, Mr. Chairman, USDA has begun to make significant changes. The passage of the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 authorized the Department to consolidate from 43 agencies into 29 agencies, to begin the process of transforming USDA into a more efficient and customer-friendly Agency. USDA historically had field offices in almost every county, in every State across the country. Last December, we announced our plan to consolidate these field offices to better serve our customers. This plan calls for the consolidation within 3 years of many of these offices, as well

as the closure or relocation of more than 1,170 offices. After full implementation there will be about 2,500 Field Service Centers that provide "one-stop service" to customers around the country. Additionally, USDA has committed to the President that by 1999 the equivalent of 13,256 full time employees will be reduced from the 114,206 person workforce of just two years ago. Our streamlining plans are developing now with an eye toward improving operations through up-front investments in modernization and enabling technologies that will ensure successful implementation.

DEPARTMENTAL ADMINISTRATION REORGANIZATION GOAL

Our reorganization is unlike any previously undertaken in the Department's 133 year history. Functions are realigning and a major cultural change is underway in the agencies to create an efficient, more responsive, business-oriented team of service providers, driven by the power of statutes, executed with the best efforts of government workers. Our goal in the administrative management area is to provide the leadership needed to help USDA agencies provide improved service to the public, at less cost to the taxpayer. This will be accomplished with a three-pronged approach to modernization:

- a) A commitment to the radical restructuring of business processes accomplished through reengineering, using technology as an enabler and proven management techniques to sustain change;
- b) Continued improvement of existing administrative infrastructures and business processes through enhanced technology, and
- c) Interim revitalization of existing, legacy systems to meet current, critical needs--pending business process reengineering--through a coordinated plan, driving towards connectivity and common platforms, emphasizing common standards, open systems, and the development of common data management protocols.

These efforts will bring modern management techniques and technology to bear where there are the greatest payoffs in terms of streamlined communications and improved customer service.

INFOSHARE, MAP AND FISVIS

During this transition period, Departmental Administration serves a vital role providing necessary leadership, coordination, oversight, policy, and guidance to program managers and policy officials. This is necessary to ensure that program delivery does not suffer while meeting the goals of reorganization and streamlining. Currently, we have underway three cross-cutting initiatives that promise great dividends in terms of overhauling and optimizing the Department's business practices and providing the enabling technologies to improve the quality of program delivery, eliminate waste and duplication, and provide optimal customer service. These initiatives are InfoShare and the Modernization of the Administrative Process (MAP) that are under my sponsorship, and the Financial Information Systems Vision (FISVIS), which is a major project of the Chief Financial Officer. All three efforts are principally aimed at redesigning how the Department goes about its business, and then bringing the latest technology to bear to expedite service delivery, administrative processing, and in the case of FISVIS, which the CFO will cover in his statement, the overhaul of USDA's financial information processes and systems. These activities are complementary, and in many instances, interrelated. They are essential for the USDA we envision and for the government effectiveness and efficiencies we need.

INFOSHARE: REENGINEERING BUSINESS PROCESSES

A vital part of our efforts to enable field service agencies and foster reengineering of business processes as they reorganize is the InfoShare program. In recent years, the Department was rightly criticized for its

outdated and cumbersome farm-service field offices and incompatible information systems. The InfoShare Program started in fiscal year 1993 as a partnership between the seven former agencies -- Agricultural Stabilization and Conservation Service (ASCS), Farmers Home Administration (FmHA), Soil Conservation Service (SCS), Federal Crop Insurance Corporation (FCIC), Rural Development Administration (RDA), Extension Service (ES), and Departmental Administration. The initial purpose and driving force of the InfoShare partnership was to pool agency resources and to coordinate the acquisition and management of information systems that support and facilitate information interchange, streamline service delivery, and avoid systems incompatibilities. Resources obtained from the agencies were focused on providing a technical solution and developing a common information systems platform in support of service delivery to USDA clients. A program staff of detailees was assembled under our Office of Information Resources Management. An operating plan was developed, outlining program activities in the areas of data management, information systems integration, telecommunications, and equipment acquisition strategies. During our first year, pilot sites were established in Osage and Sherman Counties, Kansas, Bolivar County, Mississippi, and Rockingham County, Virginia, as well as State and county offices in Kentucky. These sites tested various types of technology and improvement projects, known as "Fast Tracks."

GAO AUDIT

In August 1994, the General Accounting Office (GAO) reported that InfoShare was focusing too heavily on the acquisition of technology, not paying adequate attention to business process reengineering (BPR). The GAO said that investments in technology would be largely wasted, unless they directly enabled and supported agencies' redesigned business processes, and also identified and developed service delivery improvements. A concurrent

review of the InfoShare program conducted last Spring and Summer by a professional management consulting firm identified the need to strengthen InfoShare program management and to refocus on partner agencies' corporate business requirements. The resulting recommendations of GAO and the consulting firm were to ensure that program requirements determined the appropriate enabling technology, rather than technology determining service delivery options.

REFOCUSING INFOSHARE

Since I spoke to you last year, I am pleased to say this program has undergone a major refocusing. USDA has taken a number of steps to address the GAO recommendations:

- A significant refocusing and restructuring of the InfoShare Program was accomplished in September 1994 with the creation of a permanent, core staff in business process reengineering (BPR) and change management.
- The InfoShare Executive Committee composed of the Under and Assistant Secretaries of each mission area, and chaired by the Assistant Secretary for Administration, has engaged the program in strategic planning as a basis for focusing on BPR and supporting reorganization objectives.
- A full-time, senior executive-level Program Manager has been selected and is working closely with the Executive Committee and the Department's reorganization activities.

INFOSHARE SUPPORTS THE FIELD SERVICE CENTERS

The success of a streamlined USDA relies on a redefined field office structure-- the Field Service Centers. For the customer, the Field Service Center will mean such benefits as a central location to obtain information and to start the application of benefits, compatible electronic data and more

accurate and timely data on program regulations. For USDA staff, the new field office structure will mean streamlined business processes, an integrated telephone and data communications system, and compatible computer systems to ease the gathering and sharing of data.

InfoShare is currently facilitating the development of new telecommunications architectures --based on principles of business process reengineering-- for the consolidated field service centers. As offices close, the remaining offices must consider new ways of interacting and serving the public through integrated voice telecommunications.

Our reengineering analyses have not always resulted in a requirement for new technology. Frequently through simple modifications to how we do business, processes can be changed without expensive investments in technology. For example, the use of flexible employee hours to mirror those hours during which customers require assistance, including weekends, and early morning hours, is a feasible alternative. Another example, that was mandated by the Congress in the Department of Agriculture Reorganization Act of 1994, is the consolidation of administrative functions, including staffs and equipment in collocated field offices. I believe that the full implementation of the USDA Reorganization depends upon the concerted efforts of the mission agencies together with the InfoShare Program. I also know that planning for reorganization is a picnic compared to implementing it. It is absolutely essential that InfoShare be provided the resources to continue the work we have begun as an integral part of the Department's streamlining and reorganization efforts.

DEPARTMENTAL ADMINISTRATION BUDGET REQUEST

The fiscal year 1996 Departmental Administration budget request totals \$87,347,000, an increase of \$49,686,000 over the adjusted fiscal year 1995 level of \$37,661,000. Of this increase, \$48,618,000 is for our multi agency InfoShare project. Of the remaining \$1,068,000 net increase, \$844,000 is for program increases, \$394,000 is for the fiscal year 1996 pay cost increase, and \$170,000 represents a decrease for administrative efficiencies and staff reductions.

INFOSHARE BUDGET

InfoShare is the mechanism that will allow the Department to realize many of the efficiencies, savings, and improvements in customer service that were envisioned in the Department's reorganization. This investment will cost money. I hope that you will approve a direct appropriation for this important investment. The \$59,000,000 of appropriated funds requested in FY 1996 for the InfoShare budget is an increase of about \$48.6 million from the current \$10,382,000 provided to Departmental Administration by the program agencies and an increase of \$59 million from the FY 1995 Appropriations Act. This net increased resource level will support the following:

- a) An increase of \$2,600,000 for Business Process Analysis. This investment is required to continue Business Process Reengineering -- including the development of appropriate information technology support -- for three selected business processes. These business processes will be identified through a process of strategic planning, the establishment of concepts of operations, process mapping, and business process analysis. By the end of fiscal year 1995, three specific business processes will be selected on the basis of major benefits in efficiency and effectiveness for the field service centers. Examples of

targeted business processes are loan making, determination of eligibility for price support, and conservation planning. The increase is primarily for mid- and long-range Business Process Reengineering analysis, design, and development costs to provide contractor support for process design and software prototyping, as well as other requirements of the new technologies. During this fiscal year, a majority of the technical development will involve external contractors since this expertise is not readily available within the Department of Agriculture. Through the experiences gained in working with the contractors and through formal training, USDA will seek to develop in-house expertise and capabilities to ensure that business process reengineering can become a continuing and expanding internal function for the Department into the future.

(b) An increase of \$2,500,000 for Change Management. This investment allows for the development and implementation of a Change Management Plan among the partner agencies to allow for smooth and non-disruptive transitions as the work force advances into the new organizational structure. Studies of businesses that undertake business process reengineering, and GAO supporting statements indicate that approximately 70% of all reengineering efforts fail due to a lack of attention to the essential human element in implementing major changes in an organization. Fundamental change in the work environment requires a well conceived change management strategy. Resources will be devoted to assure open communication with employees and customers, and develop special training modules to educate and train employees on new ways of conducting business, operating automated systems, and sharing data. Change management will promote and encourage the shift in organizational culture to an organization in which greater autonomy, authority, and accountability

are delegated to field units, putting every aspect of service delivery closer to the customer. The focus for fiscal year 1996 will be on planning and preparing the work force for dramatic changes that will occur late in fiscal year 1996 and during 1997.

- (c) A decrease of \$569,000 for Business Process Improvements. Pilot efforts begun last fiscal year are nearing completion. The Business Process Improvements pilot projects, GIS/Common Land Unit, Conservation Compliance, Planetor, PLANTS, and Farm Summary have been tested in a few sites and may soon be ready for full deployment. The lessons learned during this testing have led to a deeper understanding of the need for and benefits of interoperability and integration of data systems in the field service centers. However, a continued level of resources is needed to finish this work and to support the technical testing of business process improvements in a pilot setting prior to field trials, evaluation, and further deployment.
- (d) An increase of \$624,000 for Program Management. This investment supports the program management of InfoShare, including contract support for agencies' reengineering efforts and for salaries and expenses for a management staff that will support core activities of InfoShare for the partner agencies.
- (e) An increase of \$43,463,000 for Information Technology. This investment supports field office restructuring by financing the acquisition of telecommunications systems. These resources will allow for the consolidation of the agencies' voice and data systems, provide adequate computer security measures to protect confidential government and customer information, and provide a reasonable level of service to customers. Major acquisitions of systems will occur in FY 1996 to the extent that they are justified by the findings of the program implementation to date.

LEGACY SYSTEMS

The existing legacy computer systems have neither the capacity nor capability to support the partner agencies' current program requirements. These legacy systems are expected to serve only as interim solutions for critical and emergency technology needs of the partner agencies, pending reengineering of their business processes. A major part of the effort funded by the partner agencies will be devoted to information technology that supports the modification of the legacy systems to increase their compatibility and the development of common data bases that simplify information sharing, and encourage movement towards a common platform.

The total fiscal year 1996 InfoShare program level is a maximum of \$165.6 million supported by a combination of the appropriation request (\$59 million), funds provided through the Commodity Credit Corporation (up to \$91.8 million), and the other partner agencies (\$14.8 million). The InfoShare program will coordinate and ensure that agencies' information technology acquisitions for legacy systems modernization or consolidation of data/voice telecommunications are compatible and promote information sharing by all partner agencies. For example, under the Consolidated Farm Service Agency (CFSA), the replacement of the IBM system 36 computers will be carried out directly by the agency using Commodity Credit Corporation funding. USDA is adamant that the InfoShare program must ensure that these agencies' efforts fit into a coherent, planned effort that reflects and supports business process reengineering efforts and streamlining, and reduces the overall cost of delivery for services, such as program enrollment and the award of benefits.

ADMINISTRATIVE INFRASTRUCTURE

To support our reorganization, we in Departmental Administration are working to enhance the infrastructure that supports the Department's

activities. By this we mean the automated systems, the administrative processes, and the policies, rules, and guidance that constitute USDA administrative services. We are rebuilding USDA's support systems with initiatives ranging from integrated information systems and reorganization of administrative and procurement processes, to the consolidation and modernization of USDA headquarters offices. I would like to share with you a few key initiatives which are currently underway that support these activities:

ORGANIZATIONAL CHANGE MANAGEMENT STAFF

Over the next few years, the administrative activities of USDA will be undergoing significant changes. These changes will be driven by external factors such as the Farm Bill, the Department's reorganization, National Performance Review (NPR) streamlining goals, and legislation emanating from the NPR, such as the Federal Acquisition Streamlining Act of 1994, and budgetary reductions. Change also will result from internal factors, including the current effort to reengineer, streamline, consolidate, and integrate administrative processes and systems under the leadership of the Modernization of Administrative Processes (MAP) program.

As part of the fiscal year 1996 request, \$342,000 is requested for MAP.

This increase would provide resources to integrate all National Performance Review initiatives affecting administrative personnel and activities within USDA; to lead strategic planning for reengineering Department-wide administrative business areas; to train Departmental Administration personnel on development of performance measures pursuant to the Government Performance and Results Act (GPRA,) and to monitor their progress in carrying out these measures. This headquarters-level reinvention activity complements MAP administrative systems overhaul projects funded

by the Working Capital Fund. As appropriate for process modernization efforts, MAP will undergo a sunset review every five years.

NII: AN INVESTMENT IN TECHNOLOGY

If USDA is to meet its mandates with fewer offices and people, advances in data sharing, information management, and telecommunications must be put in place in the Department. The National Information Infrastructure (NII) will link four major components: computers, networks, information, and people. This new environment will significantly improve the efficiency and economy of many program and support functions. An exciting example of this is the Electronic Commerce initiative that promises substantial cost avoidance by streamlining our current manual, paper-bound process and substituting instead a digital, on-line procurement process.

Departmental Administration's role in implementing the NII is to provide oversight and guidance to USDA agencies that support the exchange and sharing of information through development of common data definitions and data management standards that conform to those set forth by the National Institute of Standards and Technology, to develop an open systems environment (systems that are flexible and allow the use of multiple software products and communications systems to transfer data from one platform to another), and to provide the necessary telecommunications network link with the NII that supports electronic information exchange across USDA. This request provides a resource investment of \$300,000 for enabling technologies that will benefit every USDA process. Because the scope of applications under such initiatives as Electronic Commerce, Modernization of Administrative Processes (MAP), and InfoShare will continue to grow, additional communications, data management, and security requirements must be met, new interface standards defined, and increased Local Area

Network and Wide Area Network capabilities installed. This investment will help to provide the timely and effective exchange of program and administrative information at every level of USDA to support the reorganization effort.

PROCUREMENT REFORM

An increase of \$202,000 is requested for procurement reform in USDA

Both the Secretary's Procurement Policy Board which I chaired, and the Federal Acquisition Streamlining Act of 1994 mandate significant changes to the conduct of procurement activities. The requested increase would be applied to thirteen focused procurement reform projects. These projects range from expanded use of simplified acquisition methods, such as Government credit cards and third party drafts, to the development and implementation of the Federal Acquisition Computer Network (FACNET) that will allow electronic acquisition of supplies and services, to the increase in the small purchasing limit from \$25,000 to as much as \$100,000.

Implementation of these procurement reform initiatives requires a complete overhaul of the Department's procurement systems. The Office of Operations (OO) will lead development of a procurement process that is less time and resource consuming than the cumbersome process now in place. With these added resources, OO will begin activities that will result in a procurement process that is easier for the Government to obtain the goods and services it needs without making it more vulnerable to fraud, waste, and abuse. Implementation of these initiatives also will require providing support and training to USDA professional procurement staff and other systems users on how to operate in the new on-line procurement environment, systems development work on interfaces to Government-wide electronic procurement systems and networks, and establishment of demonstration laboratories to

test new procurement instruments. Much of this work will be undertaken in conjunction with and complement our NII and MAP initiatives.

I now turn to the individual budget requests for the other appropriations, starting with the Office of the Secretary.

OFFICE OF THE SECRETARY

The Office of the Secretary (OSEC) provides policy oversight and guidance for the Department and maintain relationships with agricultural organizations and others in the development of USDA programs. OSEC also oversees special projects that are conducted at the behest of the Congress. These projects include short-term studies, investigations, and research on matters affecting the Department or its constituents.

OSEC currently is made up of offices for the Secretary/Deputy Secretary, six Under and three Assistant Secretaries and their staffs. Each OSEC office is financed through separate appropriations. The fiscal year 1996 budget proposes to reestablish a single appropriation for these activities in conjunction with our reorganization. Merging these accounts will allow the Secretary greater discretion in effectively carrying out the responsibilities of the Department and implementing national agricultural policies enacted by the Congress and simplify the administrative processes for these funds.

The budget request for the Office of the Secretary for fiscal year 1996 is \$9,485,000, an increase of \$865,000 above the fiscal year 1995 current estimate of \$8,620,000. Over two-thirds of this increase, \$580,000, will support the Under Secretary for Food Safety, which was established under Public Law 103-354. Of the remaining \$285,000 requested, \$119,000 is for the anticipated fiscal year 1996 pay raise, \$24,000 for annualization of the

fiscal year 1995 pay costs, \$31,000 for one extra day of pay, \$90,000 for within grade increases and salary adjustments, \$51,000 for non-salary operating cost increases; offset by a decrease of \$30,000 in support of the President's Executive Order to reduce overhead non-salary costs.

AGRICULTURE BUILDINGS AND FACILITIES

Our 1996 budget request of \$135,774,000 is a net increase of \$761,037 above the adjusted 1995 appropriation level.

There is a \$2,194,037 increase for Rental Payments to pay GSA for the full cost of USDA's nation-wide space inventory in fiscal year 1996. The four building downtown complex has been removed from this inventory and USDA has assumed responsibility for them under its Strategic Space Plan.

A net increase of \$1,602,000 for Operations and Maintenance is needed to continue operations and support of the downtown complex. The increases and decreases are: a) an increase of \$98,000 for pay cost increases, including \$16,000 for annualization of the fiscal year 1995 pay raise; b) an increase of \$2,041,000 for inflation that will cover general operating cost increases and increases associated with utility contracts for steam, chilled water, and electricity for the Washington, D.C. headquarters complex, a Potomac Electric Power Company surcharge for electricity, as well as cost increases associated with central Department services, such as mail services, central supplies, and National Finance Center (NFC) services; (c) An increase of \$436,000 for the Fair Labor and Service Contract Act yearly pricing adjustments as required by these laws, as well as other negotiated cost increases due when the building operations and maintenance contracts are renewed; (d) A decrease of \$100,000 and 2 staff years for a reduction in Federal Employment in support of the Secretary's streamlining efforts and the President's Executive Order

mandating reduced Federal employment; and (e) A decrease of \$873,000 for administrative efficiency to support of the President's Executive Order to reduce overhead-type outlays.

The Agriculture Buildings and Facilities request also includes a net decrease of \$3,035,000 for funding of the Strategic Space Plan due to early completion of the concept design work on the South Building Modernization Plan. The request includes funds to complete the construction of the new Beltsville, Maryland office facility on the grounds of the Agricultural Research Center and to equip the new facility. This is a critical component of the Strategic Space Plan, a planned effort which began in fiscal year 1995 to eventually collocate all USDA personnel, currently in more than 17 leased office sites around the Washington area, in two locations--Beltsville and the Washington, D.C. headquarters complex. Completion of the Beltsville facility will allow the process for modernizing the South Building to proceed beginning in fiscal year 1997 by relocating a group of agencies to the facility.

ADVISORY COMMITTEES

The fiscal year 1996 USDA Advisory Committee request of \$885,000 is a net decrease of \$43,000 from the current fiscal year 1995 level of \$928,000. This level will allow existing committees to conduct their activities while at the same time reducing committee travel.

HAZARDOUS WASTE MANAGEMENT

The safe disposal of hazardous waste is a challenge which we must meet. We are now paying the cost of corrective actions associated with environmental problems caused by past disposal methods. The Department requests \$15,700,000 for the Hazardous Waste Management program for fiscal year 1996 under the CERCLA and RCRA acts. This is the same funding

level as last year. This level will allow agencies to continue to cleanup the most critical USDA sites. Funding from this appropriation is allocated to agencies based on priority needs and made available until expended. The total funding from this account and from other agency programs funds will be about \$45million.

This concludes my statement, Mr. Chairman. I am happy to answer any of your or the Committee members' questions.

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DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

ISBN 0-16-052338-9



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